

DELTA
PROTECTION
COMMISSION
RECREATION
AND ACCESS
STUDY

SUBMITTED TO THE DELTA PROTECTION COMMISSION

JULY 1994

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SUBMITTED BY
BRADY AND ASSOCIATES, INC.
PLANNERS AND LANDSCAPE ARCHITECTS

JULY 1994

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Chapter I INTRODUCTION

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A. Purpose of Project

The Delta Protection Commission is preparing an overall regional plan for the Delta in response to the Delta Protection Act of 1992,' fulfilling its obligation to manage the Delta's resources. **This** recreation and access study will serve as a background report for the Delta Regional Plan.

The purpose of the recreation and access study is to describe existing recreation facilities and access opportunities, describe recreational uses and needs, and describe policies which guide the development of recreational facilities. In addition, constraints and problems associated with developing recreational facilities are identified. Opportunities for future recreational development are explained. General design guidelines for the construction of new recreational facilities were developed and are included in the study.

Policies adopted by the Commission will be used by the five counties within the Commission's Primary Zone jurisdiction to guide recreational and public access development. The policies will also be used by the Commission for guidance in hearing appeals and in guiding its own work.

B. Process

The process used to develop the recreation and access study involved several steps. First, a number of visits to the Delta were made by the consultant team and the area was photographed. Data about the Delta was collected. Discussions were held with local and State officials.

Next, a memorandum was prepared, which included 1) a discussion of the purpose of the study, 2) a series of sketches illustrating existing conditions in

¹ State of California, <u>Public Resources Code</u>. Division 19.5, Section 29700 et sec.

the Delta, and 3) a preliminary set of goals regarding recreation and access. The memorandum was reviewed by the Delta Protection Commission staff. This study was presented to the Citizens Advisory Committee (CAC) on February 1, 1994. The goals of the study were revised based on CAC comments.

Next, this report was prepared. A draft of the Delta Recreation and Public Access Study was reviewed by the CAC on April 4, 1994. The Citizens Advisory Committee provided suggestions regarding revisions to be made, the unmet recreational needs in the Delta and made suggestions regarding the policy recommendations. The report was revised based on comments received at the meeting and on written comments. A public hearing before the Commission was held on April 28, 1994. The changes recommended by the Commission are incorporated into this final study.

C. Intent of Study

It is the intent of this study to serve as a background report which the Delta Protection Commission can use to guide its decision regarding appropriate findings and policies for the development of public recreation and access areas.

D. Report Format

This report consists of seven chapters, which together comprise the Delta Access and Recreation Study. These chapters include the following:

- **Chapter I. Introduction:** discusses the purpose of the study, the planning process, and the organization of the report.
- Chapter II. Goals: provides a list of public access and recreational goals for the region.
- **Chapter III. Existing Conditions:** generally describes the characteristics of the region, existing recreational facilities and activities.
- Chapter IV. Recreational Users and Needs: generally summarizes current and projected use levels and makes observations regarding the needed facilities.

Chapter V. Constraints: describes the factors which make development of recreation and public access facilities difficult.

Problems resulting from development of recreational facilities are also identified.

Chapter VI. Opportunities: provides a discussion of opportunities to improve recreation and access in the Delta and includes design guidelines for recreation and access areas.

Chapter VII. Local Government Policies: provides a discussion of the recreation and access policies of counties within the Primary Zone.

Chapter VIII. Conclusions

Chapter II GOALS

The goals of the Study are based on goals identified by the Delta Protection Commission Staff, the Citizens Advisory Committee and observations resulting from field studies conducted during the preparation of the study. The goals can provide a policy framework for the Plan the Commission ultimately adopts.

The goals are divided into two categories:

- · meeting recreational and public access demand, and
- · resolving recreation and public access related issues.

Both visitors and local citizens would benefit if the goals are achieved. Recreational users of both land and water would benefit. Table 1 shows the goals and which group they will benefit and whether the access would be provided on land or water.

The goals are listed below by category.

Category 1: Meeting Recreational and Public Access Demand

- Goal 1A. Provide public access and recreation areas in the Delta Region to meet public needs and demand, so long as development is compatible with existing land use and the Delta's fragile natural resources.
- <u>Goal 1B.</u> Meet a significant amount of recreational boating demand through private sector development projects.
- <u>Goal 1C.</u> Meet some of the recreation and public access demand by expanding existing public access and recreation areas.

Table 1
GROUP BENEFITTED AND TYPE OF ACCESS
TARGETED BY GOAL

Goals	Local	Visitor	Land	Water
1A Meet Demand	х	X	X	Х
1B Boating Demand	х	X	X	X
1C Expand Facilities	x	х	х	Х
1D Regional Benefits	X	x	x	х
1E Funding	х	х	x	x
1F Coordination	Х		X	
1G Promotion	Х		х	
2A Reduce Conflict		х	х	х
2B Protect Habitat		X	х	X
2C Improve Safety	x	x	х	x
2D Information		X	X	X
2E Location Criterion		X	X	

- Goal 1D. Provide recreation and access projects which have regional benefits; however, small local community projects should also be built.
- Goal 1E. Meet the funding needs of projects through public/private partnerships and other innovative arrangements.
- Goal 1F. Improve communication and coordination between recreation districts, local government, State and local agencies and private developers to ensure cost effective and coordinated development of public access and recreation areas.
- <u>Goal 1G.</u> Promote existing Delta recreational opportunities, where desirable.

Category 2: Resolve Recreation and Public Access Related Issues

The goals identified in category 2 are intended to protect the quality of life of local residents, land owners and agriculturalists, while improving the recreational experience of visitors.

Goal 2A. Reduce conflicts between property owners and recreational visitors through improved land planning and design.
 Goal 2B. Protect wildlife and wildlife habitat areas from active recreational use.
 Goal 2C. Increase recreational boating safety and reduce conflicts between recreational uses.
 Goal 2D. Use public information and other methods to educate visitors and reduce land use conflicts and safety problems.
 Goal 2E. Locate recreation and public access facilities where adequate

support facilities and maintenance are provided.

Chapter III EXISTING CONDITIONS

- - -

A. Introduction

The physical, environmental and land use characteristics of the Delta greatly influence where recreational facilities can be located and what type of facilities can be provided.

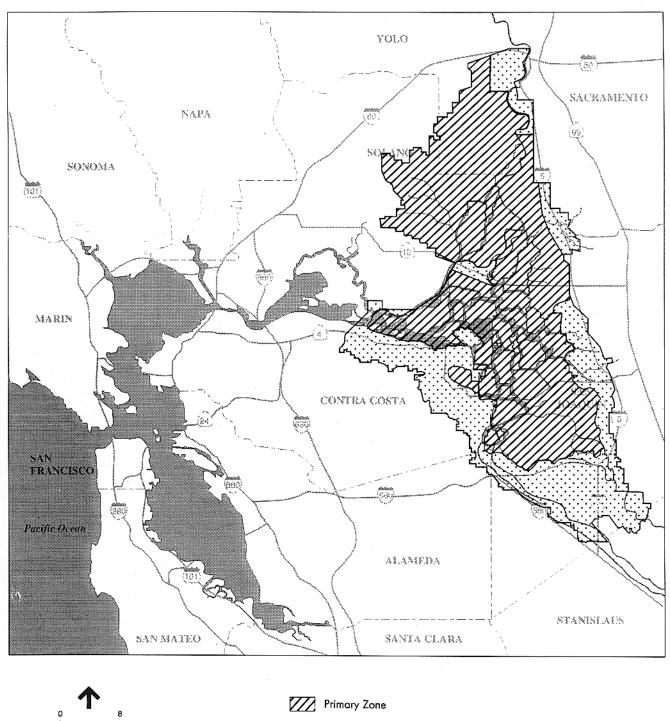
This chapter discusses those characteristics as well as the existing recreational facilities in the Delta.

This chapter lays the foundation for an understanding of the constraints and opportunities for recreation and access development.

B. Physical Churucteristics

The Delta region has a strong overall sense of place which is characterized by its numerous waterways, levee-top roadways, vast expanse of low-lying fields, historic towns, remote marinas and eucalyptus tree windrows. Small rural towns and communities dot the region, each offering an interesting and unique history. These qualities create an area which feels truly unique to visitors and locals alike.

The California Delta is sometimes referred to as the inland coast. The area includes approximately 1,153 square miles of waterways and 1,100 miles of shoreline. The Delta's two most prominent waterways, the Sacramento and San Joaquin Rivers, carry fresh water from the Sierra Nevada Range and the Central Valley to the Bay. These major rivers, along with miles of sloughs, make up the shorelines of the Delta, as shown in Figure 1.



Secondary Zone

Source: Brady and Associates, 1994.

Figure 1 **Regional Location**

The Delta waterways are used by large oceangoing ships, as well as small recreational craft. The Sacramento Deep Water Channel and the San Joaquin River offer commercial cargo access to the inland ports of Sacramento and Stockton. Many other waterways, including the Sacramento, Consumnes and Mokelumme Rivers, provide out-of-the-way anchorages for houseboats and calm waters for ski-boats and jet skis.

The Delta region is flat. Most of the area's lands are used for agriculture and the production of field crops, grains and tree-crops. Small areas of land along the sloughs are overgrown with riparian and wetland vegetation. The lowlands are surrounded by levees which form the shoreline of the Delta islands. The levees which rim the islands are many feet higher than the inland agricultural parcels. Many of the tops of larger levees serve as roadways. Levee banks are generally very steep and can be characterized as being in one of the following three conditions: rip-rapped, weedy or covered with dense riparian vegetation.

Only a few major highways cross the Delta. There are two primary **north**-south automobile routes, State Highway 160 and Interstate 5 and four **east**-west roadways: Interstate 80, Highways 4 and 12 and Thornton Road. Access to agricultural land on many Delta islands is provided by county roads and private roads.

C. Land Uses in the Delta Region

The largest single use of land in the Delta region is for agriculture. Vast tracts of land are currently used for the production of fruit and nut crops. Grazing occurs in the Delta's eastern region, as well as on Jersey Island, and Hotchkiss and Holland Tracts in the western region. The area's flat topography, high quality soils and ample supply of water have created excellent conditions for highly productive commercial agriculture, which exceeds \$500 million gross value annually.

Another important use of the Delta is recreation. The recreational activities occur on both water and land. Although private recreational developments and parks do not occupy large amounts of Delta land, recreational activity extends onto Delta waterways and levees. Recreational hunting occurs on many Delta Islands. Recreational activity and related services rank as the third largest industry in the Delta. Approximately 80 private commercial marinas provide the majority of the recreational facilities in the Delta. These facilities include approximately 11,000 berths, 36 boat launching facilities, and numerous boat rental, camping and picnicking facilities. In addition to public berths, many private homes have boat docks and boats used for recreation.

There are 22 publicly-owned recreation areas in the Legal Delta (Primary and Secondary Zones). These include State, county, city and port-run facilities. Additional public lands are also reserved for wildlife protection and preservation.

Approximately 35,000 acres, or less than five percent of the Legal Delta is developed by cities or unincorporated towns. Within each town are a wide variety of goods and services and housing opportunities.

Only one incorporated city, **Isleton,** is located in the Primary Zone, along with several unincorporated communities in Sacramento and Yolo Counties.

D. Land Ownership

The Background Report on Land Use and Development prepared by the DPC includes a detailed discussion of land ownership in the Delta. The report states there are 487,625 acres in the Delta (Primary Zone). About 50,000 acres is water. Less then 10 percent of the land in the Delta is estimated to be publicly held; the remaining 90 percent is privately held. The following is a brief summary of ownership of land potentially suitable for recreational facilities:

- The Port of Stockton owns 1,124 acres, some of which is leased for recreational use.
- Reclamation and special districts have easements over considerable amounts of land. Most of the Delta's levees which are controlled by reclamation districts are built on easements atop private lands.
- Sacramento County owns 1,567 acres within the proposed Stone Lakes Wildlife Refuge.
- The East Bay Regional Park District manages 595 acres of land owned by the State of California at Browns Island and has acquired 8.45 acres at Big Break.
- The Ironhouse Sanitary District owns 2,900 acres on Jersey Island.
- The State Department of Parks and Recreation owns 4,587 acres of land and water: 3,542 acres comprise Frank's Tract, an open water area. Approximately 1,450 acres of the Department's ownership is land: 225 acres at Brannon Island, 134 acres at Delta Meadows, a railroad right-of-way in Sacramento County, and 1,090 acres in the proposed Stone Lakes wildlife refuge.

- The Department of Fish and Game owns 8,080 acres of land and water; 7,694 acres are managed for wildlife habitat. Most of this area is water. The Department of Fish and Game also owns 7 small islands. Several fishing access areas are owned by the Department of Fish and Game, but managed by the Counties. These areas include **Westgate** Landing, Cliff House, Georgiana Slough, **Hogback** Island and Clarksburg.
- The Department of Water Resources owns 8,545 acres, including 3,660 acres at Clifton Court **Forebay**; a water area; 2,965 acres at Twitchell Island; and 1,037 acres on Sherman Island.
- Caltrans owns the State Highway rights-of-way and plans to add passing lanes to Highway 12 in San Joaquin County in 2007-2008.
- The U.S. Army Corps of Engineers owns the southwest tip of Grand Island, a former dredge disposal site.
- The U.S. Navy owns 1,900 acres in Solano County and the northern end of the Yolo Bypass in Yolo County.
- The State Lands Commission has jurisdiction over the State-owned beds of tidal and navigable waterways throughout the Delta. The precise extent and location of the State's sovereign ownership interests in these lands may not have been defined by agreement or court judgement. The State holds the sovereign lands for public trust purposes, including water-related commerce, navigation, fisheries, open space and recreation.

E. Population Characteristics

The use of the Delta recreation facilities has come from people living within 40 miles of the Delta' and thus demand for new facilities will likely come from the citizens who live in and near the Delta. Several major population centers including Sacramento, Stockton, Lathrop and Tracy, the eastern Contra Costa County cities of Brentwood, Antioch and Pittsburg, and the Solano County cities of Fairfield, Vacaville, Rio Vista and Suisun lie in the areas surrounding the Delta. This section discusses population growth in the Delta area communities and documents the dramatic increase in local population in the surrounding communities.

¹ DWR. Interim North Delta Program Draft Recreation Use Survey Report.

Table 2
POPULATION GROWTH IN DELTA AREA
COMMUNITIES, 1980-1990

City or Town	Population 1980 Census	Population 1990 Census	Percent Increase			
Sacramento County						
Isleton	914	833	-8.86			
Sacramento	275,741	369,365	33.95			
'Contra Costa County						
Antioch	42,683	62,195	45.71			
Brenhvood	4,434	7,563	70.57			
Bethel Island	1,774	2,115	19.22			
Discovery Bay	1,326	5,351	303.54			
Oakley	2,816	18,374	55249			
Pittsburg	33,034	47,564	43.98			
San Joaquin County						
Stockton	149,779	210,943	40.84			
Tracy	18,428	33558	82.10			
Solano County						
Rio Vista	3,142	3,316	5.54			
Yolo County						
West Sacramento	21,069	28,898	37.16			

Source: DWR, Delta Atlas, 1993.

Table 2 shows population growth between 1980 and 1990 in the Legal Delta (Primary and Secondary Zones). Only Isleton lost population. Contra Costa County's communities saw the most dramatic increase in population ranging from 19 percent on Bethel Island to 552 percent at Oakley. The San Joaquin County communities of Stockton and Tracy grew by 41 percent and 82 percent respectively. The City of Sacramento grew by 34 percent.

Table 3 shows the population characteristics for the Delta Communities and Delta Islands. These tables indicate that the population on the Delta Islands within the Primary Zone is decreasing.

F. Existing Recreational Facilities

1. Public Facilities

There are 22 publicly-owned recreation areas in the Delta area. Nine provide fishing access, 11 are parks (one of which is accessible only by water), and two are launch ramps. The facilities in Rio Vista are outside the Delta. Most of the facilities in San Joaquin County are in the Secondary Zone. These are included in this study because they serve Delta citizens and visitors.

Several of the parks have a full range of facilities, such as **Brannan** Island Recreation Area. Others are relatively underdeveloped, only providing a launch ramp and water access. Existing public recreational facilities in the Delta area are shown on Figure 2 and listed in Table 4.

2. Commercial Facilities

By far the most numerous recreational facilities in the Delta are the marinas. These facilities are largely privately owned. There are approximately 80 marinas in the Delta. Marinas provide many facilities beside boat berthing and boat fuel. Many marinas provide camping facilities, bait and tackle, dry boat storage, restaurants or snack bars and launching facilities for trailered boats. Table 5 shows the facilities provided at marinas.

Marinas are not equally distributed throughout the Delta but are concentrated in a handful of locations. Table 6 lists the number of berths concentrated at the marinas at seven locations. Bethel Island and Lower Andrus Island have the largest concentration of boating facilities. Bethel Island is very densely developed with resorts and marinas with over 1,000 berths. In addition to marina berths, the private facilities on Bethel Island include a large number of support and service facilities. Andrus Island by comparison is more rural, but it has almost 1,700 berths.

Table 3 POPULATION CHARACTERISTICS FOR DELTA ISLANDS (Primary Zone)

Island	Population Estimated 1987 Atlas	Population 1990 Census	Increase./ Decrease
Sacramento County :			
Andrus/Brannan Island'	1.821	2.093	+272
Dead Horse Island	3	39	+33
Grand Island ²	1.276	1.021	-255
Kimball Island	N/A	0	
McCormack-Williamson Tract	N/A	0	
Pierson Island ³	N/A	355	
Sherman Island	200	233	+33
Sutter Island	70	173	+ 103
Twitchell Island	22	87	+55
Tvler Island ⁴	429	644	+215
West Island	I N/A	0	
Contra Costa County			
Bradford Island	24	0	+24
Browns Island	N/A	0	
Clifton Court Tract	N/A	16	
Conev Island	N/A	N/A	
Holland Tract	28	35	+7
Jersey Island	9	13	+4
Orwood Tract	48	98	+50
Webb Tract	94	0	-94
Winter Island	I N/A	0	
San Joaquin County			
Bacon Island	87	260	+ 173
Bouldin Island	65	74	+9
Brack Tract	35	80	+45
Canal Ranch Tract	N/A	103	
Empire Tract	I N/A	S	
King Island	140	195	+55
Lower Jones Tract	69	112	+43
Lower Roberts Island	280	221	-59
Middle Roberts Island	285	435	+150
Mildred Island	3	0	-3
Mandeville Island	14	118	+104
McDonald Island	6	95	+89
Medford Island	5	14 I	+9

Island	Population Estimated 1987 Atlas	Population 1990 Census	Increase/ Decrease
Naglee-Burke Tract	NIA	24	
New Hope Tract ⁶	1,232	1,376	+144
Pescadero Tract	NIA	54	
Rindge Tract	15	33	+18
Staten Island	27	35	+8
Terminous Tract'	217	602	+385
Upper Jones Tract	83	46	-37
Upper Roberts Island	172	231	+59
Venice Island	60	0	-60
Victoria Island	83	155	+72
Woodward Island	6	6	
Solano County	,		
Decker Island	[N/A	0	
Hastings Tract	52	94	+42
Ryer Island	233	246	+13
Yolo County			
Merritt Island	I 226	238	+12

- 1
- Includes City of **Isleton.**Includes a portion of the Town of Walnut Grove and the Town of Ryde. Includes Town of Courtland.
 Includes a portion of the Town of Walnut Grove.
 Includes the Town of Byron and Discovery Bay.

- Includes Thornton.
- Includes the community at Terrninous.

Source: DWR, Delta Atlas, 1993.

Table 4 EXISTING RECREATIONAL FACILITIES

Name	Maintenance	Facilities
Brannan Island State Recreation Area	State Department of Parks and Recreation (DPR)	Land and water access: launch ramp, swimming beach, camp sites, picnic areas, parking, restrooms, interpretive center.
Clifton Court Forebay	Department of Water Resources and Department of Fish and Game	Land access; parking, only portion of reservoir available for fishing.
Franks Tract and Little Franks Tract	DPR	Water access only; few facilities.
Antioch fishing sites and one fishing pier	City of Antioch	Land and water access; pier, parking, restrooms.
Hogback Park	Sacramento County Parks and Recreation (SCPR)	Land and water access; launch ramps, guest dock, picnic area, parking, restrooms.
Lower Sherman Island	SCPR	Land and water access; launch ramp, parking, restrooms.
Clarksburg Boat Ramp	Yolo County Parks Department	Land and water access: launch ramp, unpaved parking, restrooms.
Oak Grove Regional Park	San Joaquin County Parks Department	Land access; lake, picnic area, dock, nature trails, interpretive center.
Delta Meadows	DPR	Land and water access; few facilities
Rio Vista Public Launch Ramp	City of Rio Vista	Land and water access; parking, launch ramp.
Rio Vista riverbank	City of Rio Vista	Land and water access: pier, barbecue pits, parking.
Sandy Beach Park	Solano County Parks Department	Land and water access; campsites, showers, picnic areas, parking, beach area, launch ramp, paved roads.
White Slough Fishing Access/Borrow Ponds	Department of Fish and Game	Land access; fishing ponds on part of Department of Water Resources lands.
Buckley Cove Marina Park	City of Stockton	Land and water access; water frontage, fishing, berths, launch lanes, parking, restrooms, gas & repair services, snack bar. playgrounds, organized recreational programs.
Fritz Grupe Park	City of Stockton	Land and water access; water frontage, fishing, picnic area, parking, bicycle racks, playing fields, restrooms, organized recreational programs.
Channel I-5 boat ramp park	City of Stockton	Land and water access: dock, launch lanes, sailing, low speed boating. picnic area, restrooms.
Louis Park	City of Stockton	Land and water access; water frontage, bank fishing, dock, launch lanes, boating, parking, bicycle racks, picnic areas, playing fields, restrooms, snack bar, organized recreational activities.
Dos Reis County Park	San Joaquin County Parks Department	Land and water access; water frontage, launch ramp, water activities, RV sites.
Mossdale Crossing Park	San Joaquin County Parks Department	Land and water access: launch ramp, parking, restrooms.

Name	Maintenance	Facilities
Westgate Landing	San Joaquin County Parks Department	Land and water access; restrooms, campsites, boat mooring.
Georgiana Slough Fishing Access	SCPR	Land and water access; parking, launch ramp, restrooms.
Cliff House Fishing Access	SCPR	Land and water access; parking, restrooms.

Source: State Lands Commission, 1991.

Table 5
DELTA MARINAS AND FACILITIES

County	Marinas	Berths	Fuel	Camping	Launch	Pumpout
San Joaquin						
Primary	13	1,561	11	9	9	7
Secondary	8	1,785	5	1	4	3
Total	21	3,346	16	10	13	10
Solano						
Primary	1	89	•	1	1	
Secondary	1	275	1	1	1	1
Total	2	364	1	2	2	1
Yolo						
Primary						
Secondary/Total	2	157	2	1		1
Contra Costa				•		
Primary						
Secondary/Total	32	3,342	20	9	13	5
Sacramento						
Primary	22	2,902	13	7	7	5
Secondaw	3	791	3		1	2
Total	25	3,693	16	7	8	7
Grand Total	82	10,902	55	29	36	24

Sources: Brady and Associates, Compass Maps, Inc., Schell Books and California State Lands Commission.

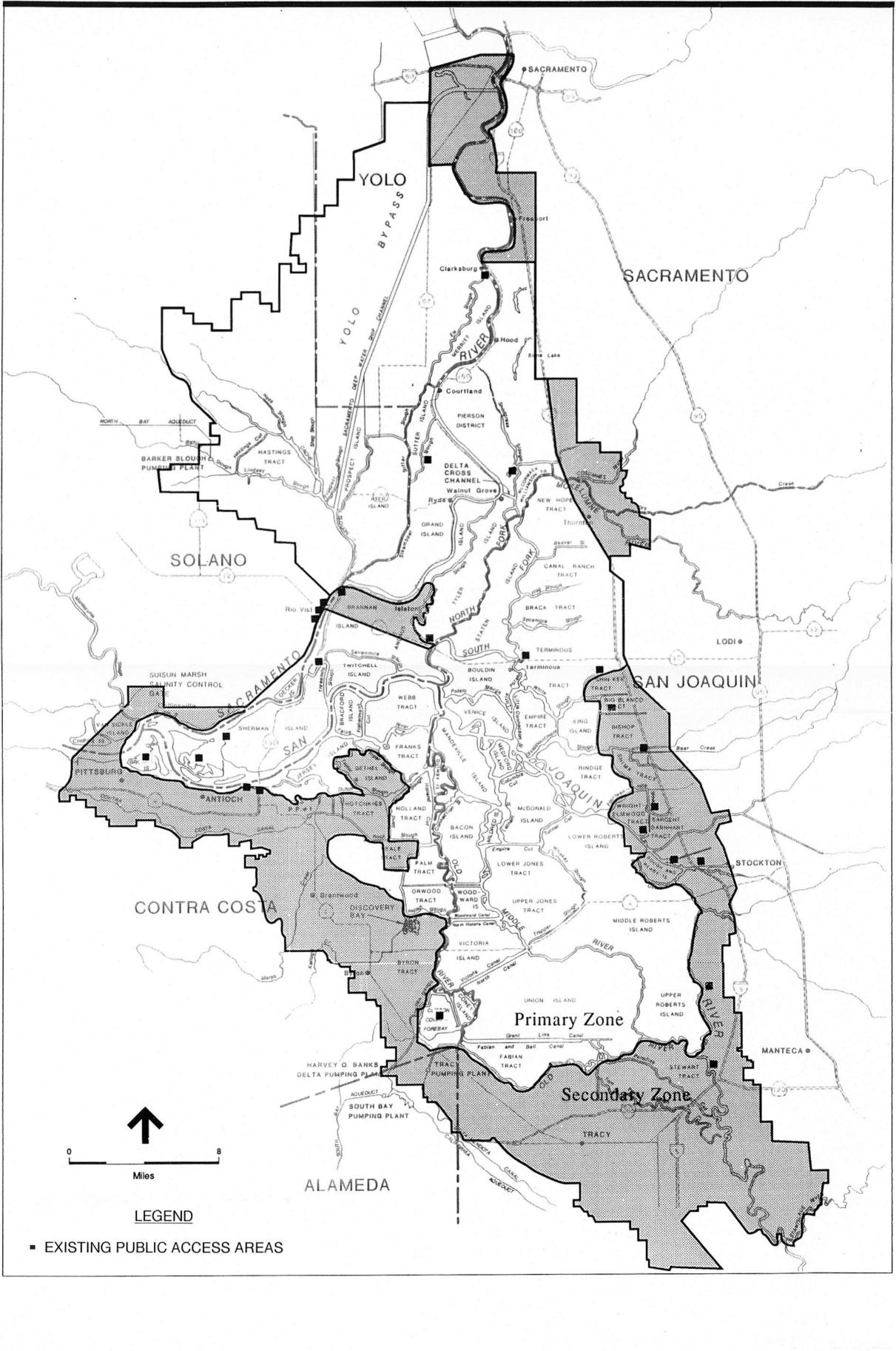


Figure 2 **Existing Public Access Facilities**

Table 6
CONCENTRATION OF MARINAS

Marinas	Berths
Sacramento County	
Ryde-Walnut Grove	370
Andrus Island	1,695
Total	2,065
San Joaquin County	
Roberts Island	998
Empire Tract King Island	719
Total	1.717
Contra Costa County	
Bethel Island	1,185
Antioch	1,199
Discovery Bay	300
Total	2,684

Source: Contra Costa County General Plan.

3. Publicly-Owned Facilities with Access by Water Only

Sherman Island Wildlife Area, Franks Tract and Little Franks Tract are accessible from the water only. In addition, some private marinas are accessible only by water, such as Tinsley Island, which is owned by the Saint Francis Yacht Club.

G. Recreational Activities

1. Boating

Boating is one of the Delta's most popular activities. Although boaters get access to the water at the commercial facilities and public launch ramp in the Delta and surrounding areas, they can travel throughout the Delta by boat. Boating in the Delta consists of several activities. These activities are described below.

- a. <u>Anchoring</u>. Many of the users of Delta waterways charter or bring a boat to the Delta for the purpose of anchoring (gunkholing) in a quiet, secluded spot to enjoy a swim or picnic or to stay overnight or for a longer period of time. There are several favored anchorages such as The Meadows and Five Fingers. In the summer, large numbers of boats anchor in these places. If the boaters stay for long periods of time they must commute to the mainland for supplies. Steamboat Slough has families of boaters who have anchored there for the summer for many generations. There are no permits required for anchoring in the Delta. In some cases, "commuting" to shore involves trespassing across private property.
- b. <u>Houseboating</u>. There are a variety of houseboats and patio boats ranging in size from 28 to 50 feet which can be rented in the Delta. The houseboats sleep from four to 12 people and are very popular rentals in the summer. No boating experience is necessary to rent houseboats.

2. Windsurfing

Windsurfing is a new sport in the Delta, but one which is becoming increasingly popular. Windsurfers use the area along Highway 160 from the tip of Sherman Island to Rio Vista. Windy Cove, a facility built at the **Brannon** Island State Recreation Area by volunteer windsurfers, is the only formal facility dedicated to windsurfer use.

3. Waterskiing and Jetskiing

Waterskiers and jetskiers like the Delta because it is close to the urban centers and because the water in the Delta is calm. Waterskiers and jetskiers use the marinas to get access to the water. However, some waterskiers come to the area from surrounding communities by boat. Waterskiers also can travel to any of the sloughs to ski although most stay near the launching facilities.

4. Fishing

There are four land areas designated for fishing access: the City of Antioch fishing pier in the Secondary Zone, the Georgiana Slough fishing access, the Cliff House fishing access, and the Borrow Ponds in the Primary Zones. In addition, casual fishing from roadsides on levee banks is common throughout the Delta.

5. Camping

Camping and **RV's** use are very popular. There are a number of RV facilities associated with private marinas and a large RV facility with boat docks at the **Brannan** Island State Recreation Area. RV parks frequently include launching ramps because many **RV'ers** have trailerable boats. Although RV use is greater during the summer months, many RV facilities are used throughout the year.

6. Hunting

Hunting in the Delta mainly occurs on private property, but controlled hunting also occurs at publicly-owned water-areas, such as Franks Tract. Some agricultural land owners allow hunting on their property during the winter season when fowl forage in the fields. The only publicly-owned upland area where hunting occurs is Twitchell Island. There are no statistics currently available for the numbers of hunters that hunt on private lands in the Delta.

7. Special Events

There are a number of organized events which also attract users to the Delta. These include the Bass Derby held each year at Rio Vista, which draws about 15,000 participants. In August, Bethel Island hosts the 50's Bash, an annual event where 20,000 automobile enthusiasts come to the island along with their restored 50's era cars. The City of Stockton hosts a number of boating activities throughout the year. Walnut Grove also sponsors a number of events including the Walnut Grove Catfish Jubilee. Courtland is the home of the annual Pear Fair. **Isleton** hosts the **Crawdad** Festival each year. In 1990 over 100,000 people visited this festival.'

8. Sightseeing

Some visitors come to the Delta to drive along the waterways. Some use the car ferries operated by Caltrans which run between River Road (Solano County) and Ryer Island. Some recreational drivers visit the old town areas of Locke or **Isleton**, or simply drive the Delta roadway to enjoy the region's scenic quality and tranquil beauty.

² California Delta Chambers. 1993.

Chapter IV RECREATIONAL USERS AND NEEDS

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A. Introduction

The Delta's many resources serve a large number of users. This chapter includes a general discussion of the amount of use in the Delta. The chapter also includes a qualitative assessment of recreational needs.

B. User Surveys

The most widely accepted and realistic method for identifying and quantifying users and determining their needs is to conduct a scientific user survey. Unfortunately, a scientific user survey of the Delta's recreational users has not been conducted for several years. The last scientific user survey of annual recreational use in the region was conducted by the State Department of Parks and Recreation in 1976. In 1993, a casual survey was conducted by the Department of Water Resources (DWR) over a three month period in the summer season, in the area north of **Brannan** Island State Recreation **Area.** The survey estimated the amount and types of recreation occurring within **DWR's** Interim Delta Program area. The survey consisted of roving use counts and was supplemented with interviews with users.

Estimates of recreational users have varied greatly. An **EIR/EIS** prepared for the California Department of Water Resources and the U.S. Bureau of Reclamation in 1990 concluded that there had been 12 million recreation days annually since 1977 (an average of 0.7 million annual recreation days per year). A recreation day is a single person using a recreational facility for a specific number of hours on a single day. A study conducted for DWR in 1980 estimated Delta use at 2.88 million recreation days annually in 1978, and projected use of 3.99 million by 1990. The 1993 DWR **study**² estimated an

¹ DWR. Interim North Delta Program Draft Recreation Use Survey Report.

² DWR and U.S. Bureau of Reclamation.

annual use of 800,000 annual recreation days by extrapolating from their **3**-month study figure.

C. User Characteristics

DWR's 1993 study identified waterbased activities (including general boating, water skiing and sailing) and boat fishing as the most common recreational activities (measured in recreation hours) in the Delta (30 percent and 15 percent respectively, 45 percent collectively). Shoreline fishing accounted for a large portion (24 percent) of Delta users. Smaller user groups included individuals simply relaxing (7 percent), walkers and joggers (4 percent), and swimmers and rafters. Other small groups included picnickers, sunbathers, windsurfers and bicycle riders.

According to DWR's 1980 study, a majority of the visitors stayed one day or less in the Delta? Approximately 50 percent of the recreational use was in the summer, 25 percent in spring, 15 percent in fall, and 10 percent in winter. The stated average recreation group size was 5.23. In its 1993 report, DWR stated the group size may be too high; however, many families comprise Delta user groups.

D. Origin of Users

The DWR and State Department of Parks and Recreation determined that most Delta recreationists live within a 40-mile radius of the Primary Zone, and over 75 percent reside within the following adjacent five counties, Contra Costa, San Joaquin, Sacramento, Alameda and Solano. The rest of the visitors live within a 100-mile radius. The 1993 DWR survey found that 22 percent of the users were local residents, arriving from the North Delta area. These users were found to be primarily day-users only.

The largest percentage of the boating activity originates at the marinas and launch ramps in the Delta and surrounding Bay Area. David Smith of Herman and Helens Marina testified at a hearing on **AB** 3379 about the origin of boaters using the Delta. Table 7 shows the place of origin and the percentage of boaters from each area.

³ Cajucum E, G. Garthe, J. Gehrmann, M. S. Geidel and S. Moore. Sacramento-San Joaquin Delta Outdoor Recreation Study. California Department of Water Resources, Sacramento. CA. 1980.

Table 7
ORIGIN OF BOATERS USING THE DELTA

Sacramento	1	10%
City of Stockton		10%
San Joaquin County		10%
Southern California	2	20%
Bay Area (outside Delta)	4	45%
Other	I	5%

Source: San Joaquin County General Plan.

While a number of Bay Area boaters may arrive in the Delta by boat, they are likely to use the private marinas for fuel, food or other services.

E. Use at State Facilities

Three state agencies maintain recreation areas in the Delta region: the State Department of Parks and Recreation (DPR), the Department of Water Resources (DWR) and the Department of Fish and Game (DFG). DPR manages the **Brannan** Island Recreation Area, Franks Tract and Little Franks Tract and Delta Meadows. The Department of Fish and Game and the Department of Water Resources manage the Clifton Court **Forebay** and White Slough Wildlife Area, and seasonal hunting on Twitchell Island. Department of Fish and Game manages Sherman Island Wildlife Area.

1. Brannan Island State Recreation Area

Brannan Island State Recreation Area is the largest public recreation facility located in the Delta Region. This facility offers land and water access, a launch ramp, swimming beach, picnic area, camp sites, parking, restrooms and an interpretive center. Recently, the recreation area was expanded to the west of Highway 160, providing a new water access area and parking for windsurfers at Windy Cove. This facility is very popular, particularly during the summer months. Although camping facilities are available at this site, most visitors are drawn because of its large boat launch area and related water user amenities. In addition, many families are drawn to the site because of its well kept-day use facilities. Between 1980 and 1988 annual attendance at Brannan Island increased by 30 percent: from 169,376 in 1980 to 222,872 in 1988.

Although well used, this site is currently not overburdened. The site is frequently nearly filled to capacity during key summer weekends. However, during the week it is very infrequently filled to capacity and in either case visitors are rarely turned away. The DPR currently has no plans for facility expansion or additional land acquisition, although the approved Park General Plan includes additional campground facilities.

2. Franks Tract and Little Franks Tract

Franks Tract and Little Franks Tract are owned and patrolled by the Department of Parks and Recreation and are accessible only by water. There are no facilities provided at Frank's Tract; however, it is now managed primarily for wildlife habitat and seasonal hunting. Under agreements with the Department, private users provide seasonal blinds for hunting. Complete use figures for Frank's Tract are not available.

3. Delta Meadows

Delta Meadows is unimproved, but receives substantial use. Many houseboats moor in this secluded area. Between 1986 and 1990 over 10,400 people visited this area. The area experienced a 250 percent increase in use between these years. The area has not yet been planned or developed for public park activities; one portable toilet is provided. The area is maintained to allow pedestrian and limited vehicle access along the old railroad right-of-way.

4. Sherman Island Wildlife Area

The Sherman Island Wildlife Area is owned and managed by the Department of Fish and Game. A nearby launch ramp is managed by Sacramento County. The area is managed for wildlife purposes and use figures are not collected. There are no facilities in the Wildlife Area.

5. Clifton Court Forebay

Public access at Clifton Court Forebay is allowed by the Department of Water Resources. Fishing access is provided along the shoreline of the Forebay. Limited facilities--parking, one portable toilet--are available. No use figures are available.

F. Use at Private Facilities

Private marina operators do not keep daily use figures such that recreational users can be measured in annual recreation days and thus compared with figures compiled by public agencies. However, DWR estimated that 45 percent of the 800,000 annual recreation days were devoted to boating activities.

Landowners allow access on private lands for hunting. There are no user statistics in annual user days for this activity.

G. Future Need Projections

Because of the lack of recent, valid, year-round scientific survey data on recreational uses, this assessment of unmet recreational needs is qualitative. The conclusions are based on previous recreation studies, qualitative analysis of existing user data and existing facilities, conversations with park managers and local officials and telephone conversations with facility operators.

In general, it appears that demand for recreational facilities will increase, but at a fairly slow rate. As new development and growth occurs in communities such as Sacramento, Rio Vista, Fairfield, Suisun, Stockton, Sacramento, Tracy and many portions of eastern Contra Costa County demand for recreational opportunities may increase. As of the date of this study, no conclusive data has been collected to validate this assumption.

As more people discover the Delta, the major activities such as boating, skiing, fishing, windsurfing and camping may increase in popularity. Driving for pleasure and picnicking may also increase in popularity, but these activities will likely have adequate facilities provided.

The most recent projection of recreation demand was completed in 1988 for the Department of Parks and Recreation. Table 8 shows increases ranging from 5% to 11% for specific recreational activities between 1990 and 1995. Between 1995 and 2000 the rate of increase declines for all activities except powerboating.

These projections, however, cannot be relied upon too heavily. They were made for only three of the five Delta counties and include the entire County, not the Delta specifically.

Table 8 PROJECTED ANNUAL RECREATION DEMAND BY ACTIVITY' (In Participation Days)^b

	1990	1995	Percent Growth between 1990 and 1995	2000	Percent Growth between 1995 and 2000
Waterskiing	2,446,507	2,592,080	6%	2,719,105	5%
Power Boating	1,413,631	1,229,801	(13%)	1,306,584	6%
Sailing	690,,042	762,867	11%	832,371	9%
Stream Fishing	4,892,046	5,277,621	8%	5,579,488	6%
Hunting	1,311,778	1,377,490	5%	1,436,268	4%
Picnicking	6,598,639	7,001,990	6%	7,388,427	6%
Nature Appreciation	8,131,936	8,785,304	8%	9,412,144	7%
Freshwater Swimming	2,942,443	3,119,402	6%	3,296,786	6%
Board Surfing/Sailing ^c	547,231	583,542	7%	612,280	5%
Camping	4,416,637	4,718,002	7%	4,995,291	6%

- Contra Costa, Sacramento, San Joaquin and Solano.
- A participation day is one person engaging in a recreation activity for any amount of time one day.
- Contra Costa and Solano Counties only: data were unavailable for the other two counties.

Source: Based on California Department of Parks and Recreation, PARIS III. Center for Design Research, U.C. Davis and EDAW for Department of Parks and Recreation, 1988.

Discussion with managers of public facilities were conducted to determine whether they perceive an increase in demand or if they could identity a particular need at their facility. These managers stated that demand was fairly stable.

The numbers of attendees of special events have increased over the years. It is likely that these events will continue to draw large numbers of people to the Delta.

H. Qualitative Discussion of Need by Activity

As discussed in Chapter III, the major activities in the Delta include wateroriented recreation such as motorboating, houseboating, waterskiing, jetskiing, windsurfing, hunting, fishing and sightseeing. The adequacy of existing facilities for these activities is discussed below.

1. Fishing

The Delta waterways support a variety of fish because the Delta is located at the interface between fresh and salt water. As a result, fishing is a popular sport in the Delta.

a. <u>Boat Fishing</u>. Anglers can launch at any of the 36 private launch ramps in the Delta. They can buy bait at one of the many bait and tackle shops and rent a boat at one of several facilities. Boat launching is also available at **Brannan** Island State Recreation Area and one of several launch ramps in the Cities around the Delta.

Although the number of anglers who use boats is likely to increase in the future, adequate launching facilities appear to be available, except on very busy summer weekends.

b. <u>Bank Fishing</u>. While bank fisherman use roadside areas throughout the Delta for parking to gain access to the waterways, these sites are not legally designated access areas and no facilities are provided. Locations for bank fishing should be identified and designated here: fishing is good, where safe parking and crossing can be designated; where adequate supervision and policing can be provided; and where rights to use such areas can be legally acquired.

The DWR Survey noted that informal bank fishing was observed to constitute a large percentage of use by land based recreationists (24 percent or 340,000 recreation hours). San Joaquin County identifies bank fishing opportunities as limited and expresses a need for new sites developed with facilities and with supervision.

2. Boating

In addition to the general field work and data analysis conducted, as part of this study, a questionnaire was developed for the DPC specifically for marinas. ⁴ The intent of the questionnaire was to determine what plans marina owners have for future development at their facilities. Few marina owners expressed a desire to expand. Those who did, listed permitting constraints and lack of additional property in their ownership as primary constraints to expansion.

⁴ Delta Protection Commission, 1994.

It is clear that the public sector does not need to become involved in additional marina construction to meet the recreational demand. The private sector has provided more than 80 marinas with over 11,000 berths. One role the public agencies may play is to facilitate permit processing for expansion and upgrading of the existing marinas which provide multiple opportunities for the general public as well as marina customers.

3. Windsurfing

A new recreational activity gaining popularity in the area appears to be windsurfing. Thousands of windsurfers use the area between Rio Vista and the tip of Sherman Island. Informal parking occurs along roadways.

A new windsurfing facility was recently constructed as an expansion of **Brannan** Island State Recreation Area by a local windsurfing group. This is an excellent example of a public-private partnership which should serve as guidance in the development of other areas. Although **DWR's** 1993 survey showed only one percent of total recreational use is by windsurfers, windsurfing is an environmentally low-impact activity, which is suitable for many Delta waterways. More safe parking on Sherman Island could be provided to meet windsurfers needs.

4. Jetskiing and Waterskiing

Although the number of jetskiers and waterskiers is likely to increase, facilities appear to be adequate from the 80 private commercial recreation areas. Jetskiers and waterskiers can get into the water at marinas with launching ramps. These activities should be located where they do not conflict with other uses.

5. Hunting

There appears to be adequate hunting opportunities on private agricultural lands and the few private hunting clubs. New opportunities could be created on publicly-owned lands, under the supervision of the Department of Fish and Game, such as the 1993 pheasant hunting on Twitchell Island lands owned by the Department of Water Resources.

6. Camping

The DWR study did not evaluate RV camping, although this use is prevalent in the Delta. The State Department of Parks and Recreation states that its facility at **Brannan** Island is full on busy summer days, but the facility has

vacancies at other times. There are private RV facilities at many of the private marinas in addition to the facilities at **Brannan** Island.

7. Sightseeing

The popularity of sightseeing and increase in the number of sightseers will depend to some degree on the continued scenic quality of the Delta. Maintaining a rural character and maintaining scenic roadways is a critical factor. Demand for a "drive in the country" is likely to increase as surrounding areas become more urbanized.

I. Unmet Recreational Needs

The Citizens Advisory Committee, Delta Protection Commission staff and consultants discussed the future needs for recreation and public access. Several observations were made. First, the unmet needs were identified as activities where few facilities exist. These include facilities for bicycling and hiking, wildlife observation and education, bank fishing and access to land from anchorages. Further, although there are a number of important cultural (historic) buildings and areas in the Delta, no site is developed as a museum or restored as an historical site. Several proposals to preserve areas in the town of Locke have been put forward. However, the cost of historic preservation has discouraged implementation of any project.

Based on observations made by the consultants, conclusions in reports prepared about the Delta and input from the staff and Citizen's Advisory Committee, the unmet recreational needs include:

- trails for hiking and bicycling
- facilities for wildlife observation and education
- bank fishing areas, including parking and trash pick-up
- · access to public land or designated upland sites from anchorages
- improved/renovated historic and cultural sites with interpretive information
- · increased policing/supervision of land and water recreation areas

1. Hiking and Bicycling

There are currently no official bicycle routes or trails in the Delta; however, some bicyclists use the Delta. A recent article in Sunset Magazine features

the Delta as a bicycling destination and suggested a bicycle route to the Delta from Rio Vista utilizing the Ryer Island ferries. Not all of the roadways in the Delta are suitable for bicyclists because they are narrow.

Bicycling trails could be provided in areas off main roadways to ensure safety for bicyclists. These same trails could be used for hikers and thus serve a dual purpose.

One possible trail development would be the Southern Pacific Railroad right-of-way between Sacramento and Hood. The railroad right-of-way from the California State Railroad Museum in Old Town Sacramento to Hood is in public ownership. Extension of the live steam train along this route is proposed, but no funding is available.

2. Wildlife Observation and Education

Although the Delta is a major seasonal wildlife habitat area, there are few opportunities for wildlife observation and education. The State and federal government have, or are in the process, of purchasing Delta property for formal wildlife preserves. Areas such as the Consumnes Preserve and Stone Lake Wildlife Refuge are areas which will be available for wildlife observation.

Point access into wildlife preserves with opportunities for birdwatching and educational activities should be provided. These activities help to educate the public about the Delta's fragile resources and the importance of agricultural activity in the midst of waterways for wildlife use.

3. Access to Lund from Anchorages

Access for the general public between the water anchorages and land, such as docks that anchored boaters and houseboaters can use to get to land without trespassing, are currently limited. The anchorage at The Meadows is close to the towns of Locke and Walnut Grove. Provision of a dinghy dock, pathway, trash containers, restrooms, and parking would provide an important amenity.

4. Bunk Fishing

As stated earlier, improved, designated bank fishing sites are limited. Specific projects to accommodate bank fishing should be provided. These areas should have safe parking, trash receptacles, be located where access up and down levees will not create levee maintenance problems, and be located at "good" fishing sites.

5. Visiting Cultural Sites

Historic preservation projects provide educational, recreational and economic benefits. Incentives should be provided so that sites can be improved or restored, and interpretive material developed.

6. Supervision/Policing

The continued recreational use of the Delta uplands and waterways requires supervision and policing. Unfortunately, staffing by County sheriffs has been lowered due to financial constraints. Permanent funding sources should be developed to ensure supervision of public roadways, waterways, and recreation areas.

Chapter V CONSTRAINTS TO RECREATION AND ACCESS DEVELOPMENT

A. Introduction

There are several significant constraints to development of recreational areas in the Delta:

- privately owned land
- suitable sites
- conflicts with wildlife habitat
- conflicts among recreational uses
- conflicts with agricultural use
- safety and operational constraints
- funding
- disputed land ownership

B. Privately Owned Land

Because most of the land in the primary zone is privately owned and in agricultural use, there are relatively few opportunities for development of public recreation areas or for the public to get to the water without trespassing across private property. Trespassing is a significant problem in the Delta.

There are very few areas where travellers on the highways can legally park next to a river or slough to picnic or view the water. Land must be acquired before public recreation projects can be developed.

C. Suitable Sites

Even if land is available, there are few upland sites in the Delta with easy highway and water access that are suitable for recreational development. The physical characteristics of much of the Delta include narrow high levees, roadways on levees immediately adjacent to steep banks, lack of upland for parking and levee banks covered with vegetation. All make landside recreational facilities difficult to develop.

Because of the lack of suitable sites, many of the Delta's recreational facilities are clustered in the few areas which are most suitable.

However, there are a few locations where new water access could be provided in conjunction with acquisition of large tracts of land by public agencies. Examples of areas where significant land access to the water could be provided are Sherman and Twitchell Islands, now owned by the Department of Water Resources.

D. Conflict with Wildlife Habitat

Many of the Delta Waterways have been designated as natural areas in the Delta Waterways Plan. This designation means that these areas are valuable habitat and that an area is too sensitive for development. Many of these areas are presently being acquired for habitat preservation.

Recreational activities such as uncontrolled boating, waterskiing and jetskiing activities on Delta waterways can adversely affect wildlife and wildlife habitat areas.

It has been noted that some channel islands which provide wildlife habitat have been eroded. Several delta landowners attribute such erosion to boat wakes and water transport.

E. Conflicts Among Uses and Congestion

The major use of the waterways occurs in the vicinity of major marinas and along the San Joaquin River and Sacramento Deep Water Channel. Thus, these waterways are congested, particularly in summer with a number of different type of uses, houseboating, cruising, waterskiing, swimming, jet skiing, fishing, and anchoring (gunkholing).

Some of the activities utilize fast boats and are not compatible with uses such as swimming, fishing or small boat anchoring for solitude. In addition, speedboats can present a safety hazard to swimmers or people in very small boats. The Delta has a high number of boating accidents and deaths from boating accidents. In 1993, there were 100 boating accidents and 12 deaths in the Delta counties. Table 9 shows accidents by County.

F. Conflicts with Agricultural Use

Almost all of the existing and proposed commercial and public facilities are adjacent to active agricultural enterprises. A conflict occurs if visitors using the recreational facilities go onto private property. There are problems of trespassing, vandalism, littering, damage to crops and vandalism to equipment. Most reclamation districts and agriculturalists do not have security patrols and the nearest sheriff may be many miles away and not available for long periods of time. Crimes of trespass and vandalism are low priority. Development should respect private agricultural uses and provide buffer areas or separators.

Furthermore, agricultural landowners ascribe damage to levees surrounding their fields to recreational boat wakes. The landowners pay for levee maintenance through taxes paid to reclamation districts who are responsible for actual maintenance.

G. Safety and Operational Constraints

Enforcing boating safety is recognized as a problem by local jurisdictions. The Counties provide limited seasonal and special marine patrols. Recreational boaters need not receive training and are not licensed.

One of the greatest difficulties recreational facility managers face is operations and maintenance. Because facilities are scattered and are not controlled by a single agency, travel time between facilities can be long. Public parks and public recreational facilities are in most cases quite distant from the main park maintenance facility or policing headquarters. Unless the facility is large, such as the **Brannan** Island State Recreation Area, trash collection, patrols and other operational activities are not feasible on a daily basis.

Decisions regarding expansion of existing facilities can be influenced or constrained by the operational considerations.

Table 9
1993 BOATING ACCIDENTS

County	Number of Accidents	Injuries	Deaths	Property Damage
Contra Costa	36	29	3	\$ 56,300
Sacramento	19	7	4	82,800
San Joaquin	34	21	4	107,600
Solano	6	7	0	15,000
Yolo	5	3	1	6,000
Total	100	67	12	\$267,700

Source: Department of Boating and Waterways.

H. Funding

Funds for public facilities are limited and are likely to remain so in the future. One source of funding for new facilities has been large public works projects such as the peripheral canal or levee expansion. Recreational amenities were proposed as part of those projects. The future funding of such projects is uncertain.

Land acquisition is occurring for habitat areas. Also, project mitigation requirements include provision of land by developers. In most cases, however, the land is not suitable for active recreation.

One source of recreational facilities in the Secondary Zone of the Delta is through conditions by local government to provide recreational facilities as part of a subdivision of land and a development project. City and County plans and zoning ordinances do allow such exactions.

Another possibility is through cooperative efforts between agencies or public private partnerships. Agencies should cooperate to develop a few select sites in the Delta. The local jurisdictions and State and federal agencies with interests in the Delta should target a few projects and work together to get these projects implemented.

I. Disputed Land Ownership

Land ownership of some parcels in the Delta is clouded by the possible existence of State sovereign ownership interests. These interests are under the jurisdiction of the State Lands Commission, which has authority to define and resolve ownership disputes. Although resolution of title disputes can be costly and time consuming, the Commission should work with private parties and other interested agencies to expedite this process in furtherance of recreational purposes, where appropriate.

Chapter VI OPPORTUNITIES FOR RECREATION AND ACCESS DEVELOPMENT

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A. Introduction

The Commission has several opportunities to promote recreation and public access in the Primary Zone of the Delta. First, the Commission can adopt policies for the region which provide guidance about when, how and where private recreation and access should be developed throughout the region. If the five jurisdictions adopt those policies, or interpretations of them, there will be a coordinated set of guidelines for the five counties.

Second, the Commission can endorse a list of projects which could be developed by public agencies: local, State and federal. This action would promote projects to meet the needs of visitors, as well as residents of the Primary Zone. Also, the Commission can provide leadership by coordinating future plans for recreation and access development.

Third, the Commission could endorse design guidelines which could improve the quality of both public and private recreation and access areas.

Fourth, the Commission could promote develop of a public information program for land-based visitors, to supplement currently available guides and maps oriented to boaters. This program can serve several purposes. It can help direct recreational users to developed recreation areas and not onto private property; can highlight special events held in the Delta; can include information about authorized parking areas, fishing regulations, historic sites and Delta communities, ferry schedules, and visitor-serving facilities such as restaurants, stores, etc.

B. Opportunity Sites

As discussed earlier, there are relatively few opportunities for the development of public recreation and access areas in the Delta Region because of the region's land ownership, conflicts with existing use and physical

characteristics. However, some opportunities to meet the needs of recreationists do exist. Major opportunities exist in the following categories:

- Lands being acquired or recently acquired by federal, State or local agencies or private organizations
- Small or unusual sites
- Joint use of farms.

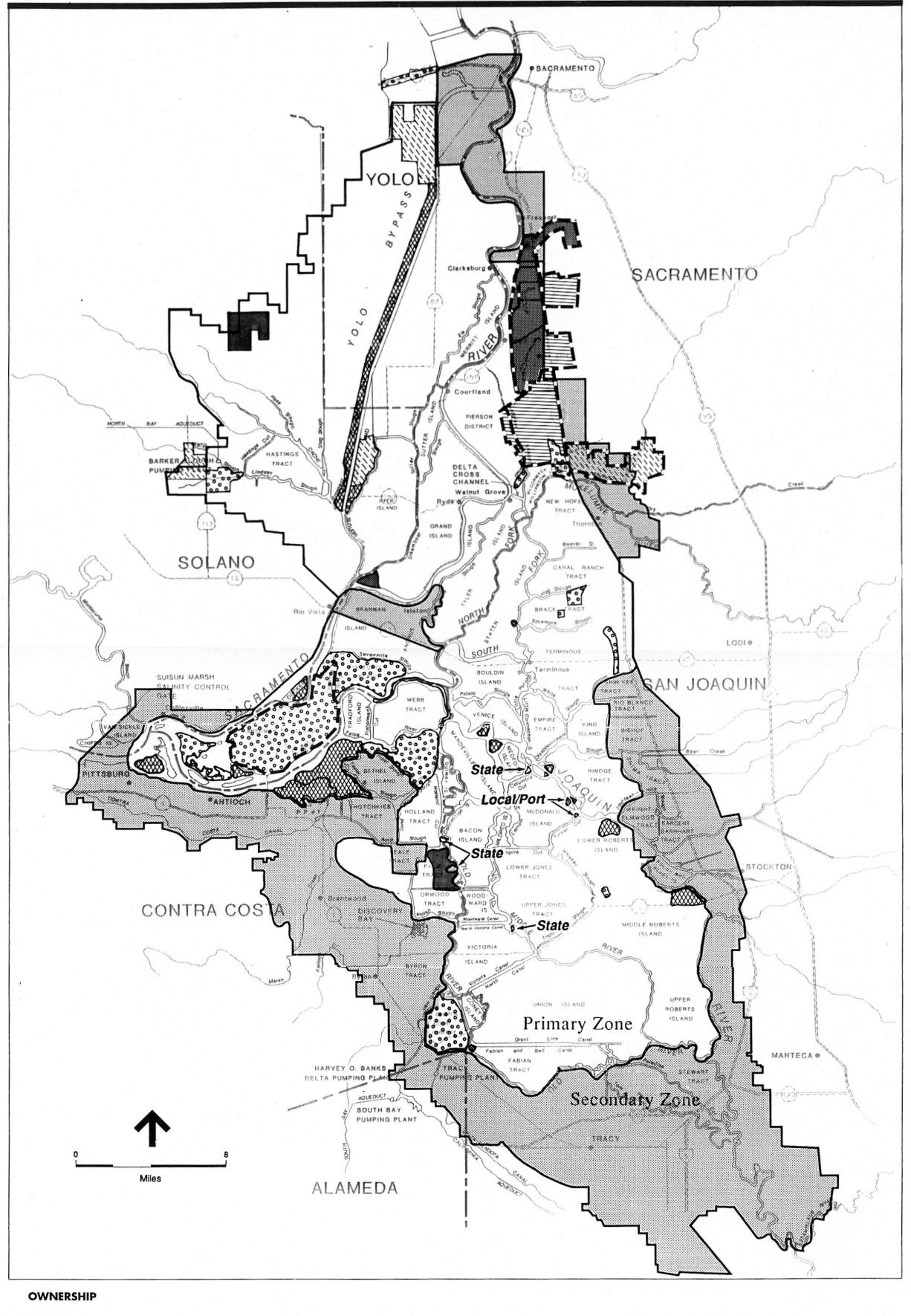
The primary Delta was surveyed and evaluated to determine whether there were any potential sites that could be developed to satisfy unmet recreational needs. In selecting appropriate sites for new recreational facilities, several criteria were used. First, the project filled an immediate recreational need. Second, the facility provided a regional recreational opportunity. Third, the facility did not conflict with existing land uses. Fourth, the facility is relatively easy to maintain, operate and police. Last, the project s selected should be designed to avoid conflict.

1. Lands owned or to be acquired by federal, State, or local agencies or private organizations.

Most of the land in the Delta Primary Zone is privately owned and used for agriculture. However, many large parcels of land are currently owned by or slated for purchase by government agencies. A total of approximately 57,000 acres are proposed for acquisition by public and private agencies and organizations (see Figure 3). These properties are located throughout the region and vary significantly in size. Large portions of this land are proposed to be set aside for the protection and management of wildlife and wildlife habitat, but have potential for providing public access. Depending on the sensitivity of the site's environmental resources, activities such as bank fishing, birdwatching, hiking, bicycling, picnicking and interpretive activities could occur on these sites.

Three areas have been identified as opportunity sites for future recreation or access. These areas are shown on Figure 4 and are described below:

a. <u>Stone Lakes Wildlife Refuge</u>. The U.S. Fish and Wildlife Service is proposing the development of Stone Lakes, an 18,000-acre site to be set aside as a Wildlife Refuge. The proposal will include a 9,000-acre core area owned by U.S. Fish and Wildlife and a 9,000-acre area maintained through cooperative management agreements with farmers. Two visitor centers are



Local/Port

Federal

222

Environmental Organizations

Private with Management Agreement

Proposed Ownership

Figure 3
Selected Existing and Proposed
Land Ownership

Source: Brady and Associates, 1994.

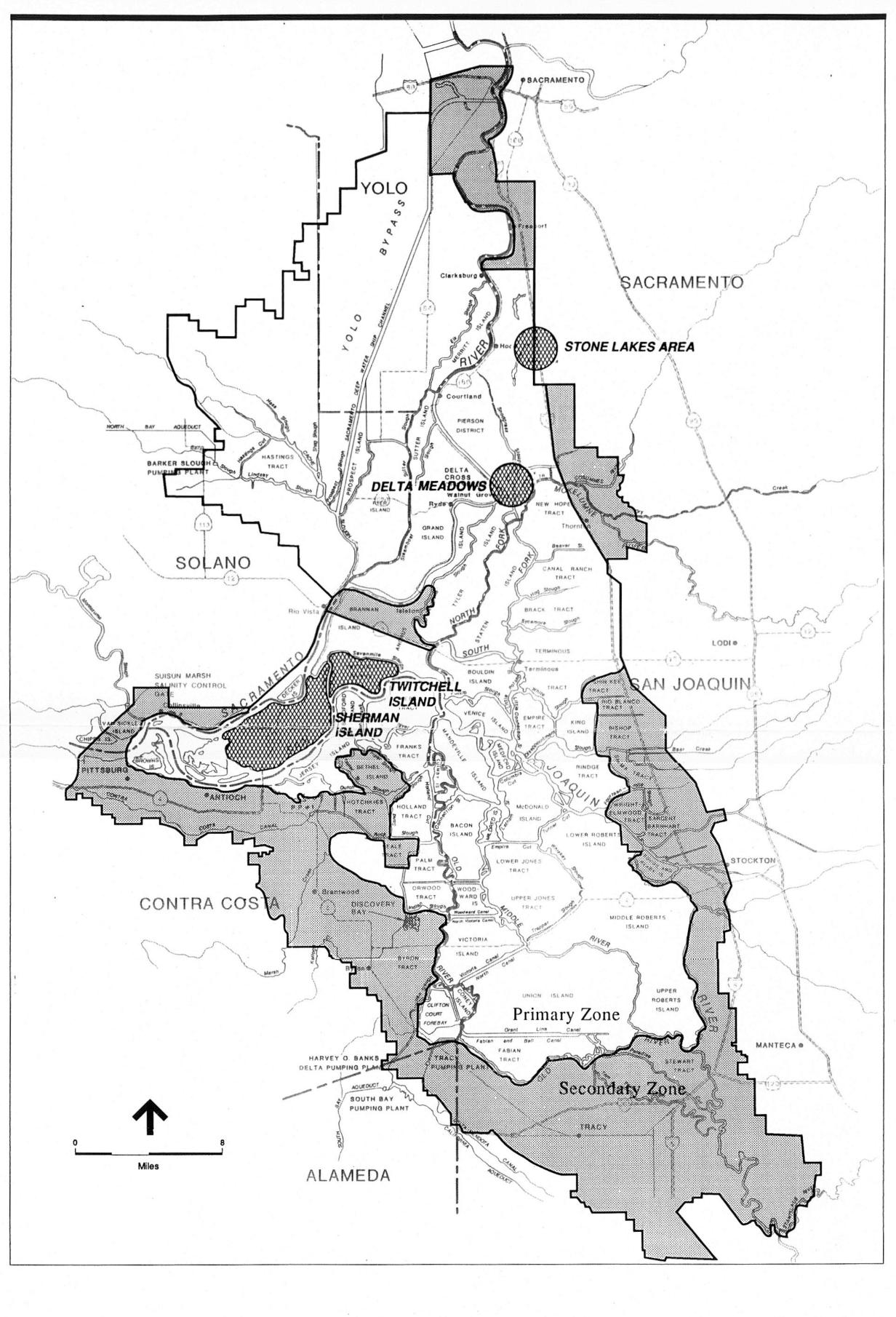


Figure 4
Recommended Public Recreation
and Access Areas

also proposed. U.S. Fish and Wildlife is currently negotiating with private land owners and other agencies to acquire the site.

This site is located in the northeast corner of the Primary Zone, near the City of Sacramento and adjacent to Interstate 5.

Acquisition is underway at this U.S. Fish and Wildlife site. Development of access and interpretation for passive recreation should be actively pursued.

b. <u>Twitchell Island</u>. This site is located immediately south of **Brannan** Island State Recreation Area, and is bounded by Seven Mile Slough and False River. It is easily accessible from State Highway 160 and **Brannan** Island SRA.

Eighty-three percent of Twitchell Island, 2,965 acres, is owned by the State Department of Water Resources (DWR). DWR is proposing to maintain the island as managed wetland habitat. Most of the site is currently used for agriculture, and in the short term some controlled hunting is allowed. Long term management of the levees could include: access for bank fishing, access for wind surfing, pedestrian and bicycle trails, nature observation, and other compatible uses.

c. <u>Delta Meadows</u>. DPR has acquired some lands in the Delta Meadows area. This area is located east of and within easy walking distance of the towns of Locke and Walnut Grove. A master development plan has not yet been prepared. A prominent attribute of this area is its lush, quiet sloughs, offering both enjoyable boating and land based activities.

Long-term development of the park could include: hiking and biking trails, small boat (canoe) launch, land and water nature interpretation, picnicking, tent camping, RV camping, and paths of Locke and Walnut Grove.

2. Small or Unusual Sites

In addition to the development of new large recreation areas and the expansion and improvement of existing facilities, small or unusual sites should be viewed as opportunity sites. These sites include small parcels of land adjacent to waterways, within public rights-of-way and in or around service areas which could be improved to serve as pull-offs, parking areas or as small gathering areas. Many of these types of sites are currently used illegally for parking. If minimum safety, parking and vehicle access standards can be met these sites could be improved. Sites with minimal improvement requirements could be ideal for bank fishing access, for sightseeing and windsurfing.

3. Joint Use of Farms

Working farms can be used as a recreational opportunity. Three examples of different approaches to using farms as a recreational opportunity include: operation of a historic farm, such as the Ardenwood Farm as a park, a program operated by a Chamber of Commerce or local government to promote public awareness and marketing of farm products, and **farmer**-developed business in which recreational visitors play a major role in farm income.

In the first instance, the East Bay Regional Park District and the City of Fremont jointly operate Ardenwood Historic Farm. The farm includes an historic house, an orchard, grain production, an historic railroad and animal pens. Visitors can observe and participate in harvesting farm products and learn about the tools and methods used to grow crops in an earlier era.

Another approach has been developed by the Sonoma County Chamber of Commerce. The Chamber promotes the agricultural industry by finding farms that grow specialty produce and encouraging the public to visit and buy products at specific farms through the publication of a map of the county which shows the specialty farms. This program is called the Sonoma County Farm Trails program.

Amish farmers in western Pennsylvania have developed another approach. They promote their own farms for visitors and charge admission. Visitors can see the traditional Amish farming operations and some farms offer visitor overnight accommodations. Other activities might include: bed and breakfast inns, picnic areas, and U-pick orchards or vineyards.

C. Improved Access Through Improved Public Information

At present there is no single publication which shows all Delta recreational sites and includes an explanation of the facilities available at Delta sites, although privately-published boater-oriented publications are available. Visitors and locals should be made aware of the facilities, activities and events available in the Delta region. The region currently offers public fishing areas, parks and boat launches. By providing visitors with clearly defined destinations, they will not only be able to enjoy the region's many assets, but they will be less likely to travel off the "beaten path" and onto private property.

The Delta Protection Commission or private or public entities could develop maps and brochures of Delta facilities. The map could designate areas that are open to the public as well as highlight facilities and special events. Brochures could be oriented to special user groups such as wind-surfers or fishermen.

Information could also be conveyed on a **signage** system which would be consistent throughout the Delta. Signs could be directional, could display critical information designating public and private property and be used both on land and water.

D. Improving Recreation and Access and Reducing Conflicts Using Design Guidelines

This section contains recommendations for Design Guidelines for public recreation and access facilities throughout the Delta Primary Zone. Recommendations have been prepared to address the following:

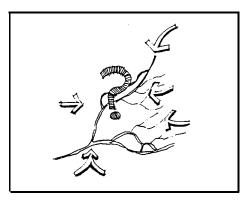
- Creating a "sense of place" and giving Delta facilities a regional context.
- · Improving access opportunities for under-represented groups of passive users, including wildlife observation, bank fishing, picnicking.
- · Improving the distinction between public and private space.
- · Resolving conflicts between uses.

The recommendations in this section identify a Problem or Issue, provide Recommended Planning Solutions, identify an Implementation Program to address the issue, and provide Design Solutions for each issued identified above. Thus, a nexus or connection between a problem and a design guideline is established. Each issue is illustrated with sketches.

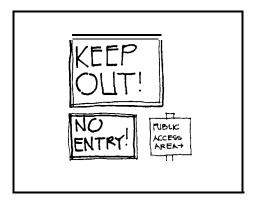
The Design Guidelines could be endorsed by the DPC and/or adopted by the local jurisdictions. Guidelines similar to those presented here can improve public recreation and access opportunities, protect wildlife habitat and private property and enhance the quality of recreation areas throughout the region.

I. Creating a Sense of Place and Regional Context for Delta Recreation Areas

A. Problem or Issue

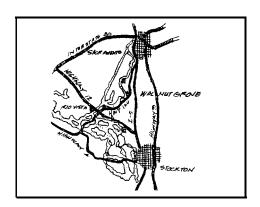


1. The Delta region has a strong overall sense of place, but it is lacking a definitive "heart", or primary public gathering and recreation area. The small gathering areas currently found in the region are not linked and visitors frequently use make-shift informal areas for recreation and access to water bodies.

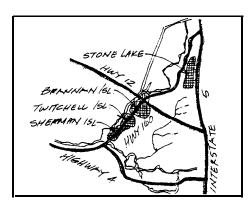


2. The few public access and recreation areas in the Delta are poorly marked and easy to miss while travelling.

B. Solutions



1. Regional Plan. Development of public recreation and access areas should focus on creating a cohesive Delta-wide public access and recreation area system. Instead of creating many, unrelated public facilities, a few key areas should be targeted to serve as primary public activity centers. A regional recreation system would provide distinct destinations for visitors, helping to create a sense of place for the region and allowing for efficient land use and management of key public facilities.



2. Key Regional Sites.

Three key sites have been identified as potential regional public access and recreation opportunity sites; Twitchell Island, Stone Lakes Wildlife Refuge and Delta Meadows (railroad right-of-way).

These sites have been identified not only because of ownership, recreational potential and physical characteristics, but because of their location and potential to provide an overall regional identity for the Delta. Twitchell Island is located at the southern end of the Primary Zone. Stone Lakes Wildlife Refuge is located near the northern periphery of the Delta Primary Zone. Each are near major circulation corridors and population areas.

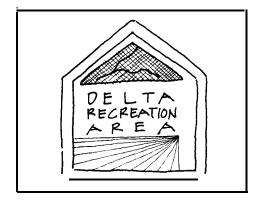
The Delta Meadows railroad rightof-way runs between Old Town Sacramento and Hood, and could provide a regional link between recreation facilities in the north and south. These three sites could be the first in a series of public projects which link all the recreation projects in the Delta together.

3. Agency Coordination. The DPC should coordinate the plans of the public agencies that hold or regulate land in the Primary Zone to ensure the efficient use of opportunity sites and funds. Projects should be evaluated based on their regional, biological and economic value, and then developed accordingly.

Cooperation between agencies in development of a regional public recreation and access program would work to ensure that regional goals are met.

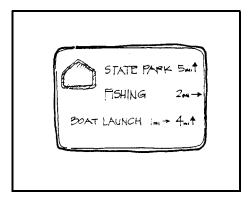
C. Design Guidelines

1. <u>Delta-wide Signage</u>. A **Delta-**wide **signage** program should be established to introduce and direct visitors through the area.



A uniform graphic logo should be developed and used consistently throughout the region. Visitors should be able to easily recognize and follow these signs.

Directional signs should be installed along the Delta region's primary transportation corridors.



These signs should identity *all* recreation and access opportunities in the area and the recreation amenity associated with them. The Delta logo should be an integral part of each of these designs to ensure continuity.



2. <u>Gateways</u>. Gateways should be established to let visitors know that they have entered the Delta region. "Gateways" are landmarks which introduce an area to visitors.

Gateways should be developed at the following seven locations:

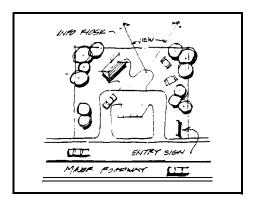
• State Highway 160, near the Antioch Bridge

- . State Highway 160, near Interstate 5
- State Highway 4, near Victoria Island
- State Highway 4, near Middle Roberts Island
- State Highway 12, near Interstate 5
- State Highway 12, near Rio Vista
- Thornton Road, near Interstate 5

These sites have been identified because they are located on the periphery of the Primary Zone along primary circulation corridors, where most visitors enter the region. They would provide visitors with an immediate introduction to the area and could provide directions, regulations and general information about the region.

These gateways could identify the entry to the area with landscape or architectural elements or a combination of the two. They should be designed to reflect the unique rural and nautical characteristics of the area.

The Delta logo should be an integral component of each gateway.

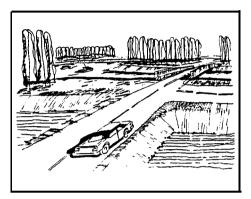


3. Information Areas.

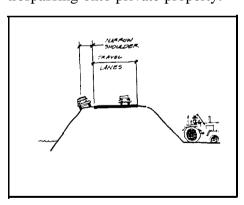
Information areas should be developed to inform visitors of the recreational opportunities in the Delta. They should be established near major gathering areas and may include gateways, towns or villages or key intersections. These centers should be developed as small kiosks or other structures and should provide visitors with directions and information about recreational opportunities in the area. The Delta logo should be clearly displayed at each center for continuity.

II. Improving Access for Passive Recreation, Wildlife Observation, Bank Fishing and Picnicking

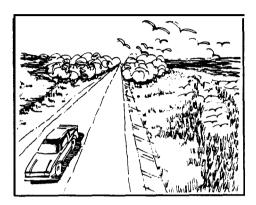
A. Problem or Issue



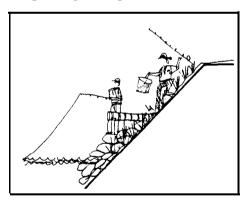
1. Although waterways are visible from many roadways, there are very few opportunities to park, fish, birdwatch, picnic, walk or just stop and look out across the landscape. This situation has led to visitors parking in unsafe areas and trespassing onto private property.



crossing dangerous. Because of the lack of opportunities to legally access waterways for activities such as bank fishing, visitors frequently park along levee shoulders in areas which are unsafe, creating risks for themselves and drivers.

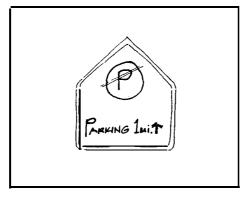


3. Although the Delta has abundant wildlife and habitat areas, there are very few legal or safe places established to observe it. This has led visitors to resort to trespassing onto private lands.

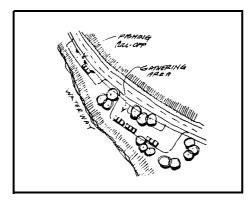


4. Levee banks are steep, making water access unsafe. Bank conditions generally include riprap, weedy vegetation or dense riparian vegetation.

B. Design Guidelines



1. Access From Public Roads. Areas intended for access along public roads should be clearly identified. Areas not intended for public use should provide signage directing visitors to other appropriate access areas. Identification of "appropriate" access areas should be done in consultation with reclamation districts. Some of the area's trespassing and safety problems might be reduced by providing visitors with an alternative site to participate in their activity. All proposed roadway widening projects should include opportunities for pull-offs.



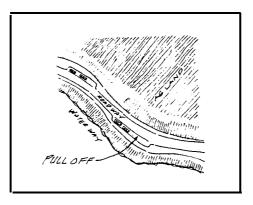
Access opportunities for bank fishing should be separated from access areas intended for other types of visitors. These groups each have different needs. Where bank fishing areas may require minimal improvements, picnic areas and rest stops need relatively large flat areas for people to congregate. If, however, it can be determined that the two needs can be effectively met in the same area, they should be.

Areas large enough to safely accommodate public access should be improved and clearly identified as such. This determination should pay close attention to the need of the user. If the area can provide parking but is not large enough to accommodate gathering areas, it should be considered as a fishing area only.

Secondary roads should also be reviewed for access opportunities. Because many of these roads are less heavily travelled than main roads, they could provide opportunities for safe pull-offs with minimal improvements.

2. <u>Roadway Design</u>. Public access opportunities such as pull-offs should always be considered throughout the region when designing new roads or improving existing roads.

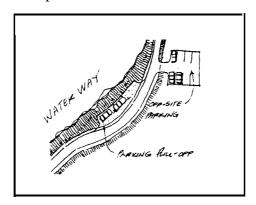
These sites should be significantly smaller and less developed than primary gathering areas.



3. Access From Public Roads. Opportunities for public access to waterways should be explored near each of the Delta gateways and near existing public recreation areas, providing visitors with easily

Pull-offs for travellers and picnickers should be developed along the region's main transportation corridors.

identifiable destinations.



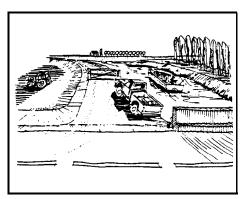
Roads which circle or are adjacent to publicly owned property should be considered ideal candidates for evaluation as public access areas.

III. Improving Distinction Between Public/Private Space

A. Problem or Issue

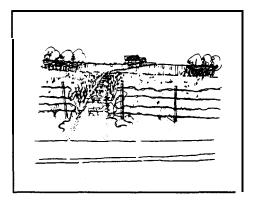


Agricultural facilities such as barns, packing sheds, orchards and fields are located very close to roadways and levees. Narrow farm roads are typically not marked as being "private" and may appear to be suitable for public automobile or pedestrian access.



Private property and areas restricted for public use are often poorly defined; there are many ambiguous areas where it is unclear if public access or use is allowed, such as levee roads. Because of this, visitors may assume that it is acceptable to park on an access

road, service area or bridge abutment.



Poaching, vandalism and trespassing are common problems throughout the Delta region. Game wardens, Park Rangers, sheriffs deputies and private property owners are each faced with the responsibility of protecting vast tracts of remote, state, federal and privately owned properties.

B. Design Guidelines

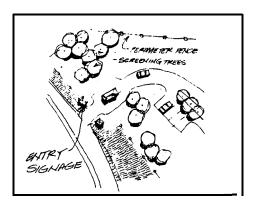
1. Policies for Siting. Facilities should be placed sensitively, considering existing adjacent land uses. Recreation areas and public access should not be located near sensitive agricultural uses such as facilities which maintain livestock or well-established maintenance, equipment storage, pumping or packing areas. Care should also be taken in locating public access areas near remote residential areas.

2. <u>Provide Adequate</u> <u>Opportunities</u>. Adequate facilities should be provided to discourage

illegal activities, such as trespassing.

Designate areas in conjunction with reclamation districts.

Areas large enough to accommodate parking pull-offs and provide access should be considered for use as small-scale secondary access sites.



3. <u>Private Property</u>. Visitors must be made aware of the difference between public open space and open lands which are used for agriculture. Farmlands, wildlife preserves or habitat areas are typically not open to public access.

Entries and boundaries to public recreation and access areas should be clearly marked to keep visitors from inadvertently wandering onto private property. Signs, fences, planting, berms or other methods of containment should be used. In addition, information should be provided at information centers describing the differences between public and private property.

"Keep out" or "no trespassing" signs should be posted.

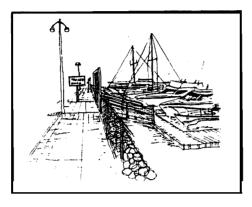
4. Restricted Areas. Public property which is off limits to the general public must be clearly identified as such. Other areas which have traditionally not been accessible to the public should be re-evaluated for access opportunities. Public access should be clearly marked.

Parking, point access or view areas should be provided on sites such as bridge abutments, levee road access points or other service-related waterway access areas. Depending on the size and characteristics of the site, improvements may only include **signage** and parking. Areas not considered acceptable for public access should have signs directing visitors to other appropriate sites.

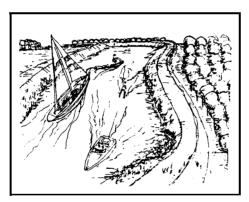
All enforcement officers, State and local, should coordinate to carry out rules and regulations for access and uses on private and public land.

IV. Reducing Conflicts Between Uses

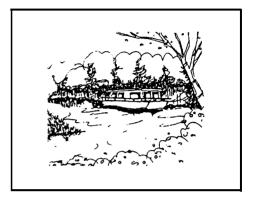
A. Problem or Issue



Most commercial waterway facilities, such as marinas, offer little in terms of non-boating water access.



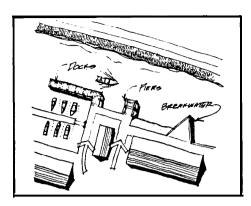
Many of the Delta's waterways are used for numerous uses including waterskiing, jetskiing, windsurfing, fishing and cruising, creating the potential for accidents.



Many remote areas throughout the Delta region are used for illegal overnight camping and as short term housing areas. These include areas accessible by automobiles and by boats only.

B. Design Guidelines

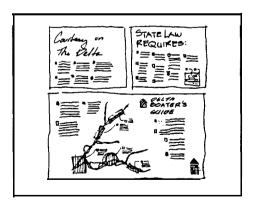
1. <u>Commercial Marinas</u>. Marinas should provide the greatest amount of improved or natural public access to and along waterways as part of renovations or expansion.



Commercial Marinas should be designed to allow direct public access to waterways. Piers and docks should be made available as public gathering areas.

Commercial marinas should also provide improvements such as parking, benches, walkways, picnic areas, signs, and landscaping which are appropriate for the project size, location and amount of waterway affected.

2. Water Safety. Water safety rules and regulations should be clearly posted in places where boaters will see them.



Commercial marinas, Delta information centers and boating-related businesses should post

maps and general information about safe boating throughout the region. In addition to providing general boating safety recommendations, information centers should clearly post State boating laws, including a clear description of the State Speed Law. Both public and private areas identified as overnight destinations for boaters should have clearly delineated boundaries. When located near towns or public gathering areas, dingy docks with direct links to public amenities should be provided, discouraging trespassing onto or across private property.

3. Overnight Use. Remote areas used for overnight stays should have some sanitary facilities and length of stay in days should be clearly posted.

Chapter VII LOCAL GOVERNMENT POLICIES

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A. Introduction

The five counties within the Primary Zone each have policies which govern recreational use, mostly found in the Parks and Recreation Elements of their General Plans.

The policies which govern the recreational development and the projects which have been identified by local government for future development are discussed below.

The policies developed by the five counties vary in emphasis and in the level of detail regarding development criteria. Sacramento County, for example, designates areas where recreational development should occur and lists factors which will be evaluated as part of each recreational development. Speed limits for boats and prohibition of night fishing are included in the policies of Sacramento County. On the other hand, Yolo County has more general policies and does not have any specific development criteria in areas outside its urban waterfronts. Both Sacramento and Contra Costa County have specific development criteria for marinas.

These policies are particularly important for two reasons. First, they can give guidance to the Commission regarding what policies it may wish to consider for adoption. Secondly, a review of the policies illustrate that they address public access and recreation differently. In order for the Commission to provide guidance and have an equitable basis for deciding appeals, it will need to adopt policies which are consistent throughout the region.

B. Yolo County

The basic policy of Yolo County is to protect the County's recreational and scenic resources, maintain diversified regional facilities, assist in preserving open space, and encourage the development of bicycle and hiking trails in and

to County parks. In order to carry out its programs, Yolo County policies encourage cooperation with special districts, adjacent counties, State and federal agencies, and private individuals and groups to maximize joint use and funding.

The County has identified several objectives to carry out these general policies. Yolo County can charge fees for Park use to fund new development. A mandatory dedication of land will be required as a condition of a subdivision or parcel map. Yolo County can establish a list of specific recreation projects annually.

With regard to water-oriented recreation, Yolo County encourages the development of riverfront recreation. The Yolo County Plan states that urban waterfronts should be used for water-dependent activities, including recreation, scenic public walkways, fishing access, and waterfront parks. Residential development on the waterfront shall not take up more than **one**-half of the total land area of the project. An urban waterfront overlay zone is established to define such areas.

C. Sacramento County

Sacramento County has adopted a Delta Community Area Plan in 1983 to address the area within the Delta Commission's jurisdiction. In addition, there is a special planning area on Lower Andrus Island.

Sacramento County has done a study of recreational uses and needs in the Delta and developed a complete set of policies for recreation and access development. The County has also identified areas along the waterways which are suitable for active recreation and for use as natural areas. Zoning has been adopted to control use in these areas.

In general, the policies encourage active recreation in areas which do not have sensitive wetland habitat. Clustering of commercial development is encouraged where support facilities are adequate or can feasibly be provided and where use conflicts can be avoided.

The development of river-town waterfronts is encouraged for water-dependent uses.

Boat wakes are identified as a problem and adoption of boat speed limits is County policy.

Cooperation among agencies to develop facilities is encouraged and several facilities are identified as desirable: Lower Andrus Island, Stone Lakes Basin, Delta Meadows and the abandoned Southern Pacific railroad right-of-way.

The applicable policies include:

- Restrict recreation activities to passive rather than active forms in wetlands of significant natural beauty, serenity and sensitive ecology.
- Manage the entire Stone Lakes Basin as a non-intensive wildlife and/or recreation area.
- Promote water-oriented recreation and tourism at appropriate locations in the Delta community.
- Cooperate with State and federal agencies in seeking means for development of appropriate public recreation facilities in conjunction with any proposed levee improvement program.
- . Limit both public and commercial recreation facilities to those which are dependent on water orientation or are supportive of water-oriented uses.
- Cluster future commercial recreational development thereby maintaining the present open character of the remaining Delta area and minimizing conflicts with other uses.
- Permit the additional and logical development of the unique and valuable water-oriented recreational potential of the Lower Andrus Island area while minimizing the loss or disruption of agricultural production, environmental qualities and the hazards from flooding, and without minimizing the quality of recreation provided the public.
- Continue to support efforts for State acquisition and preservation of the Delta Meadows as a natural area.
- Consider commercial recreational developments outside of designated areas upon a finding that their design and operation will have minimal adverse impacts on the environment, waterways, and adjacent use. The following factors will be considered in the evaluation of each proposal:
 - Access; including levee road condition and proximity to a major road.
 - Condition of levee.
 - Characteristics and sensitivity of the adjacent waterway; including width, depth, currents, amount of water traffic.
 - Proximity to other recreational facilities.

- Proximity to supportive commercial facilities.
- Need for and amount of supportive land-side development.
- Character of adjacent agricultural crops and practices.
- Distance from other navigable waterways and opportunities to disperse water traffic.
- Consider imposition of boat wake limits on segments of waterways adjacent to sensitive fish and wildlife habitats, such as channel islands, marshlands and riparian forests.
- Prohibit water-oriented commercial recreation at locations that will impact sensitive waterways or natural areas.
- Encourage the development of river-town waterfronts in a manner which will be used for water-dependent activities, and which will add to the waterfront's scenic attraction.
- Encourage the utilization of the abandoned Southern Pacific Railroad right-of-way for a bicycle trail or other similar off-street circulation mode.
- Require all water-oriented recreational developments to post informational signs and bulletin boards near points of water access, explaining the fragile nature of the waterways and adjoining lands, and listing applicable rules and regulations.
- Explore methods of collecting user fees from recreationists to fund the police manpower needed to respond to the demand created by recreational use.
- Promote creative and innovative approaches to recreational programs and improvements to meet the community needs.
- Encourage local communities to create and maintain "self-help" programs to meet local recreation needs.
- Seek funds through the community Development Block Grant program or other sources for acquisition of new park sites in the Delta towns.

The Agricultural Element of the General Plan promotes the prohibition of night fishing in the Delta.

D. Solano County

Solano County's policies on Parks and Recreation encourage development of regional resources and cooperation among local, State and federal agencies.

The Sacramento River and Delta areas are classified as Recreation Resource areas in the Parks and Recreation Plan (Solano County, 1983) because of their value as rich aquatic environments and their use as major recreation areas.

The Solano County Parks and Recreation Element lists problems raised by recreational development, including the fact that much of the recreational use in the Delta is unplanned and unregulated and can result in conflicts among users. The Plan cites speedboat operators, water skiers and fishermen as an example of potentially incompatible uses. The Plan also cites conflicts among governing entities as leading to uncoordinated efforts to place and implement recreation policies and programs.

The Parks and Recreation Element identified a number of recreation developments and resource preservation areas proposed for the Delta in Solano County, including the following:

1. State Facilities

- Ryer Island Fishing Access.
- Rio Vista Fishing Access.
- Ryer Island Recreation Area East.
- Ryer Island Recreation Area West.
- Prospect Island Recreation Area.
- · Decker Island Recreation Area.
- Prospect Slough Fish and Wildlife Area.
- Prospect Slough Regional Conservation Area.

2. Regional Facilities

In addition to the above recreation and resource proposals, the <u>Solano County</u> **Plan** identities the following resources:

- . Lindsey-Hass-Baker Sloughs.
- . Sacramento River Bluffs.

State Highway 84 - Ryer Island.

3. Local Facilities

Sandy Beach Park Expansion.

4. Policies

Solano County policies state:

- The County shall seek to coordinate recreation development and resource preservation with local, state and federal agencies through the Delta Advisory Planning Council.
- The County shall support state efforts to acquire and develop additional Delta access and recreation sites which increase recreation opportunities including fishing, picnicking, camping, swimming, boating and hiking, in a manner which is compatible with surrounding land uses.
- The County shall work with local and state agencies in developing and implementing measures to reduce or avoid recreational use congestion and conflicts.
- In future land development, public access to shoreline recreational resources should be provided in a manner compatible with the proposed uses.
- The County should pursue joint agreements with the State, Sacramento County and other agencies for development, administration and maintenance of recreational facilities where recreational benefits and cost savings can be obtained.

E. Contra Costa County

Contra Costa also has policies which apply to the Delta. Contra Costa County's policies state:

- Recreational development shall be allowed only in a manner which complements the natural features of the area, including the topography, waterways, vegetation and soil characteristics.
- Recreational activity shall be distributed and managed according to an
 area's carrying capacity with special emphasis on controlling adverse
 environmental impacts, such as conflict between uses and trespassing.

At the same time, the regional importance of each area's recreation resources shall be recognized.

- Coordinate funds and programs administered by County government and other agencies, such as the East Bay Regional Park District, to obtain optimum recreation facilities development.
- Develop a comprehensive and interconnected series of hiking, biking and riding trails in conjunction with cities, special districts, public utilities and county service areas.

In addition, Contra Costa County has specific development criteria which allow additional marinas to serve the Delta and the Bay in select areas if they meet the following criteria:

- · Projects can be clustered and located adjacent to similar uses;
- · Projects are located on waterways having an adequate channel width as defined by the State Harbors and Navigation Code;
- · Projects are in areas having adequate public vehicular access;
- Off-site improvement, such as required access roads, can be assigned to development;
- Projects can provide on-site sewage disposal;
- Projects are located in an area served by a public fire protection district; and,
- Project uses will not conflict with adjacent agricultural uses.

F. San Joaquin County

San Joaquin County did an extensive study of recreational needs in 1992 and has adopted policies regarding recreation uses.

The San Joaquin General Plan identifies recreation areas in significant resource areas. These include Potato Slough, White Slough, Light II, Connection Slough, Disappointment Slough, South Spud Island, Latham Slough, Middle River, Trapper Slough and Salmon Slough. All of the areas are designated as appropriate for conservation. Improvements are recommended for 5 of the 10 areas:

Middle River one or two launching areas for canoes

Trapper Slough nature study site

Salmon Slough canoe area, regional park

South Spud Island picnic site dock, nature study

Resource conservation areas will be designated on the General Plan Map. Within those areas discretionary permits are required. An environmental assessment for development proposals is required.

Policies:

- Areas with serious development constraints, such as the Delta, should be predominantly maintained as open space.
- The County has designed several scenic roads: Lower Roberts Island Road, Bacon Island Road, State Route 4, Eight Mile & Empire Tract Road. The policy for scenic roads states:
 - Development proposals along scenic routes shall not detract from the visual and recreational experience.
 - Initiate a program to enhance its scenic routes by litter removal programs, route identifications signs, and provision of parking at desirable viewpoints.
 - · require landscape plans for development along scenic routes
 - · include in the Design Review Manual guidelines for development in the viewshed of scenic routes.

For development along waterways:

• The County shall adopt regulations and standards for development along its waterways.

For commercial recreation:

Major recreation-oriented uses are defined as sites that contain at least 100 acres and have the potential to have more than 500 people on the site at one time or change the level of service on nearby roads that serve the sites.

They shall be:

- located near an identified recreation resource or near a major arterial
- developed so buildings occupy no more than 50 percent of a lot and are no more than 3 stories in height
- to contain a mix of uses emphasizing commercial recreation
- limited to uses that provide recreation experience or directly serve recreation

- . limited to uses that do not detract from the commercial areas of rural communities
- . limited in permanent residential development to caretaker residences
- developed with a unifying theme
- designed to minimize off-site physical impacts
- · master planned under the Commercial recreation zone

Some limited commercial recreation may also be permitted in agricultural zones. Typical uses allowed include marinas:

· Marinas shall be evaluated to assess their impacts on the waterways, riparian vegetation, adjacent land uses, and traffic circulation

G. Delta Advisory Planning Council

The Delta Advisory Planning Council developed a set of guidelines for the Delta in 1985. Many of the observations and suggestions are now part of the local government plans and the guidelines are still valid. For example, areas are designated for three levels of intensity of use: natural areas are designated for wildlife habitat; multi-use areas can sustain greater levels of activity. The establishment of speed zones by local governments is recommended. Development of a **signage** program is recommended.

Chapter VIII CONCLUSIONS

. . .

Many visitors come to the Delta, mainly to engage in water-based recreation. The visitors originate mainly from the Delta counties, with the largest number of boaters originating from the San Francisco Bay area. Visitors use the 80 private marinas and resorts, as well as the 22 publicly-owned recreation areas. As the numbers of people wishing to use the Delta for recreation increases, new facilities will be needed to meet their needs.

The type of facilities which are most used by recreating visitors are the waterways for boating, windsurfing, jetskiing and waterskiing. The marinas and resorts that provide these types of recreational opportunities are concentrated in seven areas.

It is difficult to develop recreational areas in the **Delta** because of the lack of available land with good road and water access. Most of the land is privately held and used for agriculture. When developments do occur they are usually concentrated in one area.

The concentration of facilities however, can lead to congestion on the water and land. When boaters using different kinds of craft and with different skill levels get into a restricted area, accidents can occur.

Furthermore, a majority of the Delta waterways support valuable wildlife and wildlife habitat. Use of the waterways by motorboaters can adversely affect habitat value.

Conflicts between recreational boating and wildlife habitat conservation can be minimized. First, valuable wildlife habitat areas should be identified and designated for natural resource preservation. Facilities should be sited in less sensitive areas and boat speeds should be controlled.

A significant number of people come to the Delta to use facilities on land, such as camping areas and RV parks. Thousands of people come simply to attend one of the numerous special events put on by the local communities.

The Delta could be a good place for bicycling, hiking, wildlife observation, and visiting undeveloped historic areas. However, there are few opportunities for these activities.

Bank fishing is a very popular activity. Families and single individuals can be seen fishing from many of the levees along the major roadways in the Delta. There are only one or two areas in the Delta where bank fishing opportunities have been provided as part of a public project. As a result, fishing takes place on private land and in roadside areas which are available and have been traditionally used. Cars are parked along the road in informal **pulloff** areas. Anglers may perceive these areas as public. However, many of the areas may be inappropriate for parking and fishing because they are adjacent to roadways with fast moving cars or on private property. The provision of new public areas off main roads and with adequate parking and support facilities could provide fishermen with defined areas, while diminishing the number of people who fish in undesignated, unsafe areas.

Sightseeing is a popular recreational activity due to the rural, scenic quality and of the Delta. Maintaining this quality is important for sightseers and the local community. Assuring that views from Delta roadways are not marred by unattractive uses, such as billboards, maintenance yards and junkyards, etc. will preserve the Delta's recreation and access value.

Because much of the land in the Delta is privately owned and actively used for agriculture, there are many opportunities for conflicts between recreational users and landowners. Many of these conflicts can be resolved through the proper siting and design of recreation and public access areas.

Information about all the Delta facilities is not available. The private sector has published information about marinas and resorts and the Delta Chambers has published information about special events, but there is not a brochure which explains events, recreation areas and their amenities, and explains the importance of wildlife habitat and agricultural use. As a result, visitors have difficulty determining where they can go and what opportunities the Delta offers.

Funds to develop new public recreation and access opportunities are limited. Thus, although a large number of projects have been identified as suitable for development, few projects are likely to be built. Coordination of the many agencies which provide public recreation and access can be helpful in directing the limited funds to projects which will be beneficial for regional recreation and access, as well as the Delta community.

Funds are also limited for marine patrols and security patrols. Coordination and use of innovative measures will be needed to assure that adequate services are available.

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Appendix A

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The Citizens's Advisory Committee suggested that a list be compiled of specific measures that could be undertaken to implement some of the suggestions made in the report.

The Delta Protection Commission will be adopting policies which the counties will implement. The implementation measures listed, thus are not meant to be carried out by the Commission but are intended to indicate that there are means to implement the goals and recommendations made in the report.

The list is not exhaustive nor is there a detailed discussion of how these measures are carried out. Further study and consideration should be given to the implementation measures and techniques on this list and a more complete report about the feasibility of these measures should be prepared.

Funding Available to Counties

Wildlife Conservation Board Funds:

fishing pier funding

Department of Boating and Waterways:

- funding for launch ramps & pumpout stations
- funding for boat trails

Bond Measures:

- · Prop 70 funds for parks and trails
- **ISTEA** funds for trails and bicycle lanes
- **AB** 3379 (Rainey) funds for marine patrols

General Fund - funds for signage programs

Volunteers

- Use for marine patrols
- Use as park maintenance and police

State Programs

- Boaters Gas Tax modification of existing laws could allow gas tax to go to counties or for specific projects.
- State General fund used to construct public recreation and public access on state property
- SLC land exchanges used to settle ownership questions can provide property for recreational and other use.

Public - Private Partnerships

- Marina and Resort developers could cooperate with adjacent public landowners to create facilities which the public agency does not have adequate funding to pursue.
- Projects which can be developed by public or private entities which are funded by fees.
- Roadside parking similar to the SNOPARK program in the Sierras allowing parking by permit on Forest Service land. A public or private agency can collect the fees.
- · Enforcement fines can be used to finance projects.

Appendix B

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Recreation and Access Findings:

- F-l. Water-oriented recreation has been popular in the Delta since the late 1930's and 1940's. A 1980 report prepared for Department of Water Resources estimated 12 million recreation days annually since 1977. Most recreation use occurs late spring through early fall, although recreation activities occur year-round. There are no current, Delta-wide user statistics available.
- F-2. Population of the Primary Zone continues to drop from its population highs in the early 1900's. Population in cities and areas around the Delta (Fairfield, Davis, Sacramento, Lodi, Stockton, West Sacramento, Galt, Laguna/Elk Grove, Lathrop, Tracy, Brentwood, Antioch, and Pittsburg) continue to increase dramatically. Over 21,000 acres of agricultural land in the Secondary Zone (8 percent) were converted to urban uses between 1976 and 1993, a 50 percent increase in urban use.
- F-3. Studies show that most people who recreate in the Delta live within a 40 mile radius of the Primary Zone (Bay Area-Yuba City/Marysville-Highway 49-Turlock) and reside in Contra Costa, San Joaquin, Sacramento, Alameda, and Solano Counties. The rest live within a 100 mile radius (Red Bluff-Tahoe-Fresno).
- F-4. The unique recreational aspect of the Delta is the extensive network of waterways. Many waterways are owned by the State of California and are under the supervision of State agencies, especially the State Lands Commission and the Department of Fish and Game. Many waterways are dredger cuts which were excavated to provide materials for levee construction. Dredger cuts inundated with navigable waters may be used by the public for navigation.
- F-5. The Delta waterways are recognized as valuable habitat for resident and migratory species, including fish, amphibians, birds, and mammals.
- F-6. Some recreational activities are detrimental to habitat values; such as those that create loud noises, create waves or wakes; or disturb sediments. Recreational boating adversely impacts the stability of some levees through creation of wakes increasing costs of maintenance. Wake erosion also adversely impacts wildlife habitat areas, such as channel islands.
- F-7. Most of the existing recreational opportunities are provided by the many private marinas. Marinas include support facilities (restrooms and **pumpout** facilities), launch ramps, boat storage, sales and repair, boat and houseboat rentals, bait shops, picnic areas, camping, RV camping, restaurants, and markets.

F-8. Marinas are located throughout Sacramento, Contra Costa, and San Joaquin Counties. Marinas are clustered in several locations within the Delta, notably Bethel Island (Contra Costa County) and Lower Andrus Island (Sacramento County).

A total of **almost** 11,000 berths exist in the Legal Delta; about 3,500 each in Sacramento, San Joaquin and Contra Costa Counties, about 350 in Solano County, and about 150 in Yolo County. Approximately 4,000 are located in Delta cities, the remainder in the Counties. Approximately 40 percent are located in the Primary Zone. Approximately 60 percent are located in the Secondary Zone.

- F-9. Currently, Sacramento County is reviewing or has approved over 500 new berths and Contra Costa County is reviewing a new **341-berth** marina at Discovery Bay West and a **24-berth** marina at Bethel Island.
- F-10 The marina permit application process is long, expensive and difficult due to: difficulty in obtaining upland sites and leases for underwater lands, land ownership issues, possible impacts to the environment including rare and endangered fish and plant species, limitations on dredging, and protection of riparian vegetation.
- F-11 In the Primary Zone, existing public recreation and access facilities are limited in number and include: five fishing/launching access points owned by Department of Fish and Game and managed by Sacramento and Yolo Counties, fishing access at Clifton Court Forebay, White Slough Wildlife Area, Brannan Island State Park, Delta Meadows (minimal improvements), San Joaquin County's Westgate Landing, and White Slough Wildlife Area.
- F-12 In the Primary Zone, proposed public facilities include: trails and an environmental education center at the Stone Lakes Wildlife Refuge; trails at Yolo Bypass Wetlands project; future improvements at **Brannan** Island State Park and Delta Meadows, and possible improvements on the Southern Pacific Railroad right-of-way between **Freeport** and Hood; public access and recreation components of Department of Water Resources's North and South Delta projects.
- F-13 In the Secondary Zone, existing public recreation and access facilities provide access to Delta waterways. These facilities include: Antioch fishing piers; launch ramp, fishing pier, and Sandy Beach Park in Rio Vista; **leveetop** trails and Garcia Bend Launch Ramp in City of Sacramento; trails, small boat launching, and educational center at Cosumnes Preserve in Sacramento County; and in San Joaquin County: White Slough Fishing Access, Buckley Cove Marina Park, Fritz Grupe Park, Channel Boat Ramp Park, Louis Park, Dos Reis County Park, **Mossdale** Crossing Park and Oak Grove Regional Park.
- F-14 In the Secondary Zone, proposed public recreation and access facilities include: waterfront improvements and riverfront access in the Southport project in West Sacramento; City of Sacramento public golf course; new recreational vehicle park in **Isleton**; extensive riverfront access in Gold Rush City project (Stewart Tract) in the City of Lathrop; extensive riverfront access, marina, and two golf courses in Mountain House project in San Joaquiu County; Delta Environmental Education Center and trails near Jersey Island in Contra Costa County; riverfront access in the Delta Cove project in Antioch; public golf course on Bishop Tract in San Joaquin County; a soccer complex near the Lodi sewage treatment plant. Five cities may receive applications for seven new marinas.

- F-15 The most popular Delta recreational activities are boating and fishing. Fishing takes place on the water and from the levee banks. Other popular activities include: windsurfing, waterskiing, PWC activity, camping, hunting, attending special events, bicycling, and sightseeing.
- F-16 Bank fishing takes place on the sides of levees adjacent to public roadways. The areas alongside the roadways used for parking and the levees belong to individual landowners or to Reclamation Districts, not the County or the State. While this "informal" use has persisted for many years, some landowners have had to prohibit access to certain levees where irresponsible or abusive use, littering, camping, and other activities have put the landowner, the levees, or agriculture in jeopardy.
- F-17 Water sports use different sizes and types of watercraft traveling at different speeds. To address the public safety concern raised by recreational users and Delta residents alike, the State and Counties have adopted and posted speed limits and no wake zones around docks and marinas. These regulations, and other boating safety laws, are enforced by the County Sheriffs' and Cities' Marine Patrols.
- F-18 Law enforcement personnel in the Department of Fish and Game and Department of Parks and Recreation also enforce State and local laws.
- F-19 Public funds are extremely limited for maintenance of existing facilities or construction of new facilities.
- F-20 Negative impacts on uncontrolled public access in the Delta are the incidences of trespass, vandalism, littering, poaching, destruction of habitat, and fires.

Recreation and Access Policies:

- P-l. Where public funds are limited local governments shall promote maintenance and supervision of existing public recreation areas over construction of new public facilities.
- P-2. To minimize impacts to agriculture and to wildlife habitat, local governments shall encourage expansion of existing private water-oriented commercial recreational facilities over construction of new facilities. Local governments shall ensure any new recreational facilities will be adequately supervised and maintained.
- P-3. Local governments shall develop siting criteria for recreation projects which will ensure minimal adverse impacts on: agricultural land uses, levees, and public drinking water supply intakes, and identified sensitive wetland and habitat areas.
- P-4. Local governments shall improve public safety on Delta waterways through enforcement of local, State, and federal laws.
- P-5. Local governments shall encourage provision of publicly-funded amenities in or adjacent to private facilities, particularly if the private facility will agree to supervise and manage the facility (fishing pier, overlook., picnic area) thus lowering the long-term cost to the public.
- P-6. Local governments shall support multiple uses of Delta agricultural lands, such as seasonal use for hunting, or improved parking and access sites.
- P- 7. Local governments shall support improved access for bankfishing along State highways and County roads where safe and adequate parking can be provided and with acquisition of proper rights-of-access from the landowner. Adequate policing, garbage cleanup, sanitation facilities, and fire suppression for such access shall be provided.
- P-8. New, renovated or expanded marinas shall include adequate restrooms, pumpout facilities, trash containers, oily waste disposal facilities, and other facilities necessary to meet needs of marina tenants. Use fees may be chargedfor the use of these facilities, but such fees shall not exceed the cost of maintenance.
- P-9. Local governments shall encourage new recreation facilities that take advantage of the Delta's unique characteristics.

Recreation and Access Recommendations:

- R- 1. Support a scientifically-valid survey of current recreational uses and current and future recreation needs in the Delta to determine type, number, and location of needed recreation facilities. Study needs for trails, unified directional **signage**, and billboard controls, in the Delta.
- R-2. Support a scientifically-valid study of the carrying capacity of the Delta waterways for recreation activities without degradation of habitat values which minimize impacts to agriculture or levees.
- R-3. New projects in the Secondary Zone, adjacent to the Primary Zone, should include commercial and public recreation facilities which allow safe, supervised access to and along the Delta waterways (pedestrian and bike trails, launch ramps including small boat launch ramps, windsurfing access, overlooks, nature observation areas, interpretive information, picnic areas, etc.).
- R-4. Marina owners and operators should take advantage of grants available from the Department of Boating and Waterways to **fund** new pump-outs.
- R-5. To protect rare and endangered fish species **from** adverse impacts of poaching, the Department of Fish and Game (DFG) should study the feasibility and value of banning night fishing in the Delta.
- R-6. State and federal projects in the Primary and Secondary Zones should include appropriate recreation and/or public access components to the extent consistent with project purposes and with available funding. State and federal agencies should consider private or user group improvements on publicly-owned lands to provide facilities (example: windsurf access at **Brannan** Island State Park).
- R-7. Local governments should develop design guidelines for new or enlarged recreation facilities to protect adjacent agricultural land uses.
- R-8. Local governments should develop funding sources to provide adequate enforcement of existing laws to protect health, safety and welfare of Delta recreational users.
- R-9. To provide adequate dilution of any potential discharges, new marinas or marina expansions should not be permitted within 1.5 kilometers (0.9 miles) of any drinking water intake located in an open waterway, nor within any waterway or dead-end slough that terminates in a drinking water intake. Projects not meeting this criteria should be considered on a case-by-case basis to determine if a proposed project can be mitigated to provide comparable effectiveness.
- R-10. New, expanded, or renovated marinas should minimize toxic discharges (including paint, paint chips, chemicals, heavy **metals**, tribytulin, oil, grease, and fuel) and prohibit discharges of untreated sewage as required under local, State, and federal laws and regulations.